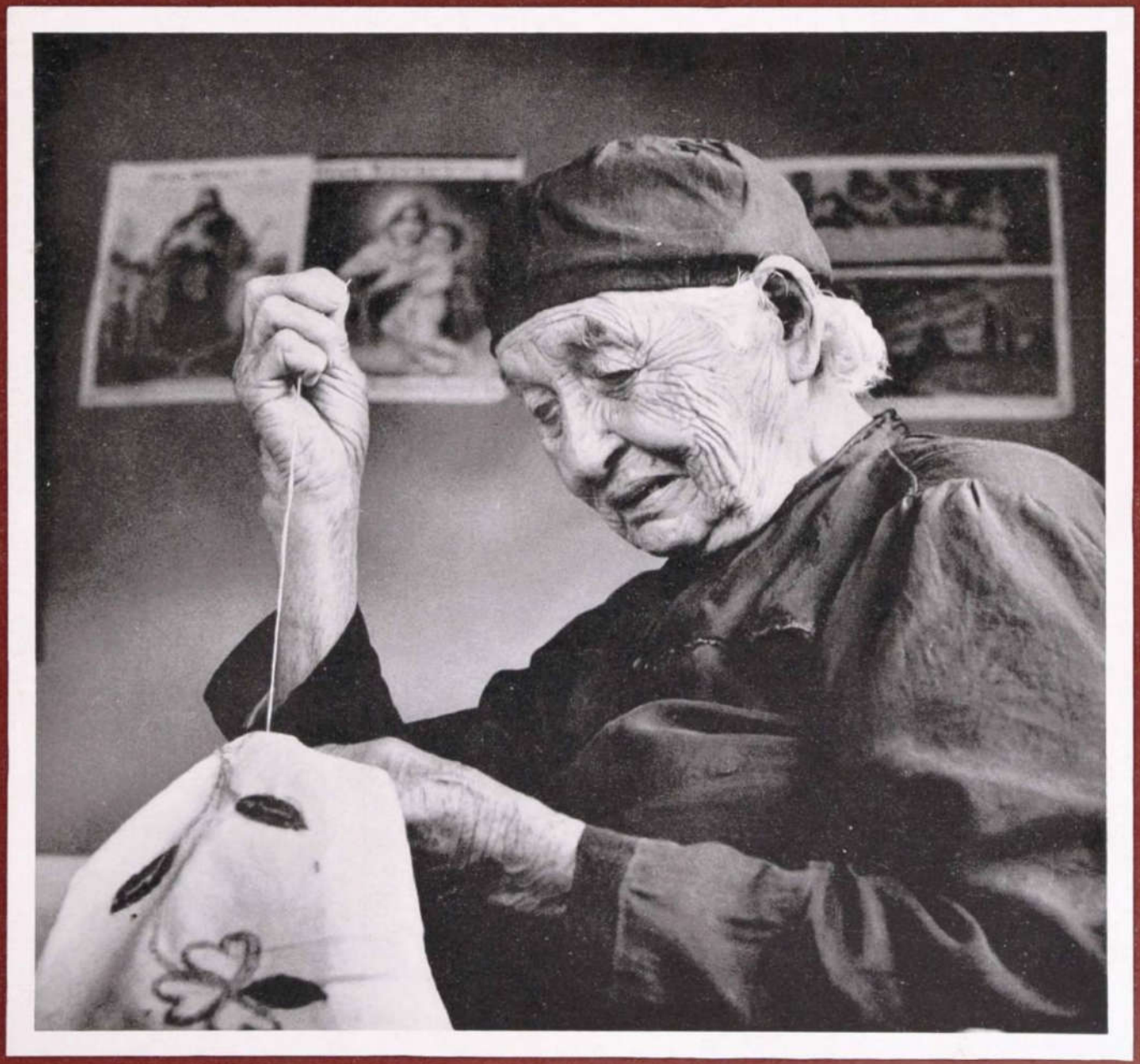
AUTUMN 1956

The Beaver

MAGAZINE OF THE NORTH



madame x

Nobody seems to know much about this little lady: except that an unknown Indian carved this stone likeness of her, a long time ago.

Chances are, though, this Madame X is really an old customer of ours, the early counterpart of today's homemaker . . . a familiar figure we see shopping daily in our giant multi-storey department stores or in "The Bay" stores, our smaller departmental stores.

Hudson's Bay Company.

INCORPORATED 2ND MAY 1670.

A CANADIAN INSTITUTION FOR THREE CENTURIES

AUTUMN 1956
OUTFIT 287
TWO DOLLARS A YEAR

The Beaver

MAGAZINE OF THE NORTH

Clifford Wilson, Editor

CONTENTS

4 **CANADA TALKS ACROSS THE TOP OF THE CONTINENT**
Leland Stowe

9 **BOYHOOD AT THE LOWER FORT**
Hamilton B. Chipman

15 **MACHINES TO THE RESCUE**
Murray Morgan

18 **WHICH JOLLIET?**
E. E. Rich

22 **BANNOCK**
John Macfie

24 **FOOD FROM THE FLORA**
Bradford Angier

28 **PEOPLE OF THE INTERIOR**
Rosemary Gilliat

36 **ARCTIC BRIDE**
Wanda Neill Tolboom

42 **ON THE TRAIL OF ALBANEL**
Jock Francine

50 **SMALL WORLD**
Harold V. Green

54 **AUTUMN PACKET**

55 **NORTHERN BOOKS**

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COVER: Indian centenarian, Granny Seymour of Prince George, twice-widowed wife of H B C post managers.

Rosemary Gilliat

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WINNIPEG 1, CANADA

Dr. Stowe, a Pulitzer prizewinner of 1930, is celebrated as a foreign correspondent, radio commentator and lecturer, and author of six books.

CANADA TALKS ACROSS THE TOP OF THE

by Leland Stowe

HOPE had almost been abandoned for bush pilot Paul Rickey and his passengers, an Indian mother with two small children, missing for five nights in Manitoba's northern wilderness, with temperatures down to 35 below zero. All morning, December 27, 1953, Royal Canadian Air Force search planes continued to send negative reports to Gordon Hauch, Chief of Manitoba Telephone service's northern radio-phone network. At 12.40 p.m. his transmitter-receiver crackled again.

"Missing aircraft is on south shore of God's Lake . . . Intact . . . SOS stamped out in snow," said an RCAF pilot's voice.

"That's terrific!" exulted Hauch across 200 miles of frozen desolation. "What's your position?"

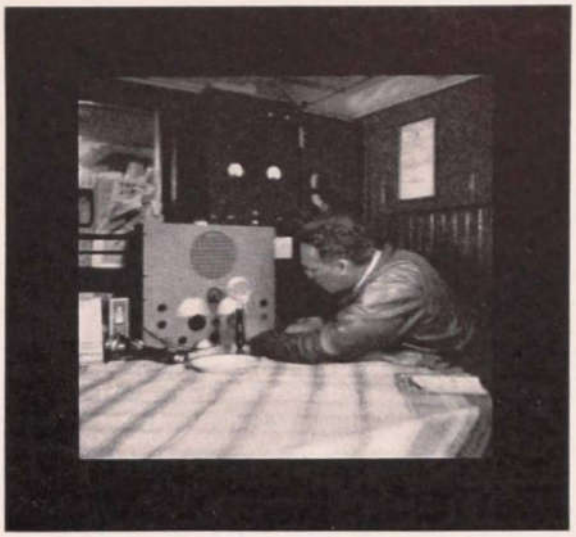
Within an hour Hauch had alerted the nearest MTS post, 140 miles eastward, and a plane was flying the half-starved survivors toward Island Lake's nursing station. "All okay!" the pilot sang out. Four more lives had been snatched from death—chiefly due to radio telephone.

The humanitarian role of radio telephone, often called RT, could scarcely have been imagined when U.S. Secretary of the Navy Josephus Daniels in May 1916 held the first ship-to-shore radiophone conversation with the battleship *New Hampshire*. But within 30 years RT had revolutionized modern communications. Since World War II this fantastic telescoper of time and distance transformed living conditions in many primitive and outpost regions around the world. Few people hearing their taxi-drivers receive radio-phoned "pick-up" orders realize that this same device is probably unrivalled today as a lifesaver, time-saver and moneysaver.

In Canada this three-way blessing has been put to notable use. Beginning with three Pacific Coast stations, set up in 1921 by its Forestry Service, farflung RT networks are now operated by dozens of federal and provincial agencies. The Dominion's communications-responsible Department of Transport early pioneered with its first prewar coast-to-coast network, penetrating even the arctic tundra and muskeg zones where Department of Transport stations became "everybody's radio post office." Although dispatched solely as weather observers, by the late 1930's the operators often became key "frontier-crackers," running an airstrip, public-service radio station and quarters for transient bushmen. Today DOT maintains over 400 air and marine stations alone, with some 65,000 frequencies assigned to public and private users.

In British Columbia, trackless wilderness and formidable mountain ranges prohibit land telephone lines through most of the province's 366,000 square miles. Thus British Columbia first developed radio telephone extensively; still leads North America in the scope and diversity of its use. From initial "point-to-point" stations and ship-to-shore service, inaugurated by North-West Telephone Company in 1930, its network rapidly expanded nearly 500 miles to Alaska's borders; currently operates over 500 land stations and serves directly more than 2800 ships and tugs. From Vancouver to the Yukon and the Arctic coast Pacific Western Airlines directs its 86 planes and six helicopters, from 23 RT centres, as they fly chartered supply missions to hundreds of lumber and fishing camps, forest look-out towers and inaccessible communities. Typical of numerous governmental agencies, the Forestry Service in British Columbia alone uses 394 sets from ranger, patrol and look-out stations to its patrol-boat fleet.

"Radio telephone has streamlined British Columbia's 60-million-dollar-a-year fishing industry, with tremendous reductions in operating costs," says Department of Fisheries superintendent A. J. Whitmore. Whitmore's Vancou-



W. E. Brown, H B C district manager, listens to a message on board the schooner "Fort Severn" in Hudson Bay, 1939.
R. J. Wickware

ver office gets four on-the-spot weather and "catch" reports each day from seiners up and down the coast, while 14 commercial firms conduct similar daily exchanges. The firms shift their ships like pawns on a chessboard—to wherever salmon or herring are running strong. Packing firms are warned in advance of loaded vessels' arrivals.

About 75 percent of British Columbia's 8500 fishing craft, Whitmore estimates, now carry RT. "I am no longer alone," explains an independent one-man seiner. "If I need help, I call a friend." Fishing crews at sea, formerly without news of their families for weeks, can now call their homes as easily as from a corner drugstore—and every seiner afloat often gets its chief entertainment by listening in.

Every sizable operation in British Columbia's 630-million-dollar lumber industry has its own RT system, directing and synchronizing company railroad tracks, locomotives, barges, tugs and airplanes. "Many lives are saved," says British Columbia Loggers' Association Manager John Burke. "Formerly it often took one or two days to get an injured man to a doctor. Now we get them out in an hour or two. All aspects of lumbering are also speeded up, especially deliveries of shortages and spare parts." Thanks to "air-wave directions" some 400 British Columbia tugs dodge fogs and storms along this bad weather coast; avoid "dead-heading" losses through diversions to homeward-bound pick-up jobs.

Depredations by log-boom pirates, once a serious drain on lumber profits, have also been cut in half. Skipper Jim Cates was churning into Vancouver harbour at two o'clock one morning when he noticed a craft parked alongside a log boom suspiciously douse its lights. Cates, rightly suspecting log boom pirates, warned the police by RT. The pirates, having kept their own set open, took off at top speed. For 20 minutes, holding his tug close on their twisting and circling wake, Jim broadcasted every turn of the wild chase to harbour cops. He finally cried: "They're heading straight in—east of Terminal docks!" Two police cars screamed to a halt and the pirates were nabbed as they leaped ashore.

An RT-directed Marine Rescue Service, launched in 1933, has achieved inestimable savings in lives and salvaged ships. Marine Rescue, closely integrated with the RCAF's Search and Rescue organization, uses the latter's distress-call frequency, its emergency appeals reaching all ships anywhere off the North Pacific coast. "This assurance of immediate aid has raised the morale of all ships' crews tremendously," says Captain James F. Stewart, chairman of the Tugboat Owners' radio committee.

Last February the gill-netter *Ethel Kay* reported urgently: "We've struck a rock in Deep Bay . . . Ship about to roll over . . . Six persons aboard . . . Two women and children . . . Deep Bay—." In the sudden ominous silence Captain Cyril B. Andrews, MR's manager-broadcaster, grimly recalled that there are seven Deep Bays in British Columbia waters. But he announced quickly: "Attention all Ships! Anyone in vicinity of Deep Bay, come in at once." From all seven localities vessels answered—and Andrews sent every one into action. Within minutes a tug advised: "Ship sank as six survivors got ashore in a rowboat. All safe and aboard."

The U.S. Coast Guard's teamwork with Marine Rescue is equally impressive, as shown in a sea-going cops-and-robbers' chase last June. Receiving a U.S. Coast Guard

appeal, Captain Andrews broadcast an "all ships" request for whereabouts of the sailboat *Vagabond*, in which robber suspects were reputedly fleeing. A Canadian tug promptly reported having passed such a craft at midnight. With all vessels in the vicinity alerted, two tugs shortly advised Andrews: "She's just ahead of us!" spurred by this tip, a sheriff and two deputies raced toward the sailboat in a USCG cutter just as the two tugs closed in on it. "Keep away from that boat!" the sheriff yelled into his RT. "It's armed and dangerous!"

At that moment City Editor Bruce Larsen of the Vancouver *Province*, eavesdropping for chance news leads, dialed in on the drama and scooped his own reporters on the story. "Radio telephone is a tremendous help to newspapers," he says. "Sometimes we even talk with rescue ships as they haul survivors off a sinking boat."

RT communications spark every major aspect of Canada's Far-North development. Prospectors, geologists, wild-cat drillers and seismic crews, armed with "walkie-talkies," comb the wilderness. Uranium, gold and other mines are RT-equipped. Larger firms maintain their own networks, as exemplified by Imperial Oil Company's 24 stations linked to its Peace River headquarters in northern Alberta. To thwart "air-tapping" by rivals, geologists' important findings are code-dictated. First to give news of a big uranium strike by radio-phone in 1948, prospectors Roy Robey and John Albricht merely said: "Have important pitchblende find. Send geologist for appraisal." Only the message's receiver knew their location east of Lake Athabaska, where their discovery evolved into multi-million-dollar Misto Mines.

To spur its northern development Saskatchewan's government launched an all-out RT service in 1946. Chief Radio Engineer Ronald Hook expertly "hand-tailored" numerous sets for rugged conditions—including a midget portable and a semi-portable look-out tower. In this province 500 strategically spotted sets "air-link" 140,000 square miles, mostly roadless. Says Hook: "If a man is packing through the bush, fighting a forest fire, in a patrol cabin, at a mining or fishing camp, in his plane or car—we give him communications." In Saskatchewan's adjacent province the Manitoba Telephone System has created, since 1948, a similarly far-reaching network.

Largely due to RT, Saskatchewan's forest fire destruction has been reduced from a 1937 peak of 2,195,000 acres to a postwar yearly average of 400,000 acres. "Last week we had four fires in very bad places," Fire Control Officer Fred Warburton informed me. "In the old days it would have taken a week to reach them. But within 12 hours our Smoke Jumpers got three and had the fourth under con-

In the icy wastes of the Arctic, dog-sled travellers will soon be able to communicate with posts 50 miles away.

D. B. Marsh

trol—instructed by radio-phone at every step. Through our network we get news of almost every fire within minutes after it starts."

Before its Air Ambulance Service was established, most of Saskatchewan's inhabitants, scattered sparsely across its 251,000 square miles, lived out of reach of its few highly specialized hospitals. Flying 2,500,000 miles in the past ten years SAAS has transported over 8000 patients. Under Supervisor-Pilot Donald N. Campbell its six planes are equipped as needed with electric aspirators, incubators for premature births, an iron lung—plus oxygen. An air-trained nurse accompanies every flight.

Flying a desperately ill pneumonia victim Pilot Don Campbell found 17 aircraft "stacked up" above Regina's airport for instrument landings. A first priority touch-down got the patient to a hospital in time to save his life. On another mission the stork almost out-speeded the ambulance plane; Regina's control tower asked Campbell to circle until an airlines plane had landed. "We've got three persons on board," exploded Don. "But unless you give me priority right now, we'll have *four*!" He got the priority.

Across one million square miles of Canada's boundless North, 100 Hudson's Bay Company posts file weekly verbal reports, formerly often obtainable but once a year. Weather-warned H B C schooners deliver winter supplies before freeze-up. When alarming reports came in about a Hudson's Bay agent, missing for six weeks on a mail delivery dogsled run to Baffin Island's Frobisher Bay, company officials went to work on the development of a radio unit that could be installed on a dogsled and withstand the incessant poundings to which the sled is subjected. H B C's Chief Radio Engineer S. G. L. Horner put the problem to a U.S. firm which uses a wet-cell battery similar to those developed for guided missiles, to produce a compact 10-pound power supply for use with standard Canadian-made portable radio telephones. Just delivered to several H B C Arctic outposts, it promises an epochal life-saving revolution in dogsled travel. Merely by raising a three-sectional aerial rod, blizzard-bound "mushers" can now report their locations, and appeal for help from 50 miles or more.

Among the North's countless humanitarian epics none is nobler than the selfless heroism of Health Service nurses. Flying alone to combat a grave flu epidemic in a northern Manitoba Indian encampment, a nurse found herself completely cut off by the six-week spring ice break-up. Yet she saved 600 Indians from possible death—aided solely by daily radio-phone checks with her base doctor. This frequently practiced, long-distance doctor-nurse liaison enormously increases the effectiveness of medical treatment in the wilds.

The wife of a post manager gets in touch with a neighbour hundreds of miles away. Rosemary Gilliat

George Horner, "Sparks" on board the "Nascopie" in 1938, talks to a distant post. He is now the Company's chief radio engineer. Lorene Squire

RT-equipped snowmobiles add another new dimension. While making a 125-mile trek to visit a patient, Dr. John Millar's hospital advised him of a severe haemorrhage case at distant Island Lake. Trail-breaking through heavy snows left the doctor's snowmobile out of gas, marooned in desolate barrens, 70 miles from his destination. Millar called MTS operator Gordon Hauch, who relayed his plight and location to Island Lake. From there a snowmobile was sent to the rescue. Thanks to RT, Dr. Millar reached his patient that night and completed a 500-mile round trip the next day—always in touch with his hospital.

In the winter of 1954-55, Winnipeg's Patricia Transport Company pioneered a "feasibility run" by RT-equipped snowmobile across 700 wilderness miles to Hudson Bay. Since then all freight hauling tractor trains maintain instant communications with each other. Blizzard-smothered under ten-foot drifts, the crews often assure their anxious families, far away, that "it's perfect weather for gin rummy up here." Says Patricia's Manager H. B. Wilson: "As far north as there are jobs to do, and from coast to coast—we go anywhere— and our crews are never out of touch with their bases."

Throughout the upper four-fifths of Canada's awesomely open spaces, frontiersmen and bush dwellers today are magically welded by radio telephone into the world's most gigantic common interest community. Dispelling the past's inescapable loneliness by sharing each other's problems and dramas, housewives nightly bridge vast solitudes with domestic chit-chat. Playing weekly concerts at a fixed hour Mrs. Fred S. Woodrow, an accomplished pianist and wife of a Department of Transport official on eastern Hudson Bay, long provided priceless "company" to solitary outposts. Each Christmas Eve DOT's Hudson Bay and Strait's stations link all their inhabitants together in a festive entertainment competition over their "Northern Network." For the only time in the year the local Eskimos talk with relatives on remote capes and islands. Bouncing square dances, interspersed with gags and toasts to invisible fellow-celebrants, reverberate over hundreds of miles of forests, muskeg and tundra.

Only those who live beyond civilization's amenities, surrounded by immensities of silence and nature's barriers, can fully comprehend the manifold blessings with which radio telephone has transformed the Far North. Says Canon Alan Greene, clergyman-skipper of a British Columbia Coast Mission hospital ship: "Wherever people live cut off from outside contacts it has removed their sense of helpless isolation and made them like one family." ◆

Eskimo kahmotiks like this one at Pangnirtung can now be equipped with small radio sets that will withstand sub-zero temperatures and the incessant poundings of dog-team travel. N. Ross

BOYHOOD AT THE LOWER FORT

by Hamilton B. Chipman

WHEN George Simpson, Governor of Rupert's Land and head man of the Hudson's Bay Company in Canada, gave orders for the construction of Lower Fort Garry he did so without consulting his superiors, the H B C Committee in London. It was a bold step for him to take, but he was not called "The Little Emperor" for nothing and there is no record of his being reprimanded for his action.

Work on the stone fort began in 1831. In 1832 George Simpson moved into the "Governor's Residence" but not until 1846 were the massive walls, bastions and buildings completed.

For a few years Lower Fort Garry served as the headquarters of the Company's operations from the Atlantic Ocean to the Pacific. Then Governor Simpson and his staff returned to the original Fort Garry, 18 miles south, where Winnipeg, capital of Manitoba, now stands.

The Lower Fort fell from its high estate and became a mere trading post. So it continued to be until 1911. In 1913 the Hudson's Bay Company leased the fort to the Motor Country Club of Winnipeg. In 1951 the Company deeded Lower Fort Garry to the Dominion Government as a historical site and since then the public has enjoyed access to the grounds and to those buildings not reserved for the members of the club and their guests.

This article deals with the summers spent at the Lower Fort by my father C. C. Chipman and his family from 1891 to 1911.

Sixty years and more have passed since I first saw Lower Fort Garry. My father, recently appointed Commissioner of the Hudson's Bay Company, had driven us down from Winnipeg. Mother sat beside him in the surrey and my older brother and I in the seat behind. It was a glorious day in June, the team of chestnuts were in fine fettle and it took us little more than two hours to complete the journey of some twenty miles.

From the stone fort's tall flagpole fluttered the Hudson's Bay Company's flag, token that the Commissioner was "in residence." This was not the H B C red ensign, but the earlier Company flag, with the coat of arms on a white field. John H. Stanger, manager of the trading post, his wife and her sister greeted us and while my parents were shown over the main building (the Governor's Residence as it was then called) two small boys eagerly explored the interior of the fort. We peered through the loopholes set all along the walls. We pulled open the heavy doors of the four bastions and found that while one was used as an ice-house, another had been converted into a hayloft. Two were empty. One of them had formerly served as a powder magazine, the other as a bake-house. And there was a third large building which stands south-east of the main entrance to the fort where bales of furs and sacks of seneca root were stored prior to their shipment to Winnipeg. Of special interest to my brother and me were the muzzle-loading cannon mounted on wooden gun-carriages. These obsolete pieces of ordnance were cast 150 years ago.

A wooden store (long since demolished) contained an ample stock of household necessities for the women, and tools, fishing nets and lines, cartridges, tobacco and so forth for the men. Liquor was sold in those days though

Since his retirement from the City Hydro service Mr. Chipman, who lives in Winnipeg, has been writing articles and verse, his particular interest being local history.

A garden party at the Lower Fort in 1909 given for the British Association, which was meeting in Winnipeg that year.

never to the Indians. Business in this commodity was brisk especially on Saturdays when settlers from across the river rowed over to join their friends whose cottages dotted the west shore from the parish of St. Andrew's north to Selkirk. One rule, however, was strictly enforced. No drinking was allowed inside the fort walls. On the rare occasions when a customer's thirst overcame his discretion the culprit would be deftly steered through the nearest gate by Stanger. He was a man well equipped by nature to handle the job for in his prime he had been a champion at wrestling and other tests of strength in which buffalo hunters, voyageurs and trappers took part whenever they forgathered.

The interior of the Residence was very different then from its present layout. The side facing south was occupied by the Stangers the year round and was partitioned off from our quarters. To the left of the main entrance was our drawing room—to the right the dining room, behind which was the kitchen, and adjoining the dining room the "schoolroom" where my sisters spent an hour or two daily with their governess. Upstairs were the sleeping quarters. I don't remember how many rooms there were but I do know that one was reserved as a guest room and there was accommodation for my mother and father, my sisters and their governess, the cook, a maid, my brother and me.

When extra guests arrived the school room was converted into a bedroom and my brother and I and our young friends slept in the hayloft, fully dressed except for our boots. I vividly recall the night when Charles Ruttan, Edwin Johnstone and I were just settling down to sleep and a small toad leapt inside my open shirt. The little beast was icy cold—I couldn't, of course, squash it—so aided by my two friends I stood on my head until the toad disappeared into the darkness from which it had materialised.

Our family and friends were surprisingly comfortable in spite of a noticeable lack of modern conveniences. We had no hot and cold running water. Plumbing was primitive

Gossip at the garden party. Exchanging notes are William Gunn and Margery Chipman.

A visiting bishop holds the horse for the Commissioner's daughters, Edith (left) and Dorothy.

and there was no electric lighting. When darkness came, oil lamps were lit and guests, lamp in hand, mounted the stairs to the rooms assigned them by my mother. Each bedroom contained a bed, a chair, a mirror and a wash-stand on which was a basin and an iron pitcher filled with rain water. (The river water was far too muddy to use and besides was "hard as a rock.") The supply of rain water was replenished daily from barrels placed under the eaves-troughs. The water had to be strained through netting for the barrels contained a multitude of "wrigglers" as we called the mosquito larvae. At times our stock of rain water ran short. Then the rumble of an approaching thunder storm was music to my mother's ear, and tubs, buckets and pots of all sizes were rushed out to catch the rain.

Guests were numerous during my father's twenty years tenure of office. I still have my mother's visitors' book and in it are the signatures of many of those who spent a day or more at the Lower Fort.

The name of Sir Charles Hibbert Tupper, one time Prime Minister of Canada, appears on one of its pages, and those of Sir William Van Horne and Sir Sandford Fleming of Canadian Pacific Railway fame. Lord Strathcona, the Earl of Lichfield, Sir Thomas Skinner and Sir Robert Kindersley have inscribed their names in the book. These four were Governors or Deputy Governors of the Hudson's Bay Company. Three Lieutenant-Governors of Manitoba, Sir Daniel McMillan, Sir Douglas Cameron and Sir James Aikins, were guests at the Lower Fort, as was Archbishop Matheson.

It was at Lower Fort Garry that I first met the Reverend Charles W. Gordon whose novels published under the pen name of "Ralph Connor" were best sellers for many years. Then there was W. H. Drummond, the "Habitant Poet," who read us a number of his poems in the French-Canadian vernacular of which he was a master. One visitor appealed particularly to the younger members of our family. He was a tall man, dramatic in speech and gesture, who could imitate the whistle of a gopher, the chatter of a squirrel and the notes of birds with amazing fidelity. I still treasure one of his books entitled *Animal Heroes*. On the flypage is the inscription "C. C. Chipman with kind regards of Ernest Seton Thompson."

These guests might be described as occasional visitors. The regulars were the more intimate friends of my parents, all residents of Winnipeg, the J. B. Persses, the Walter T. Kirbys, the H. N. Ruttans, the A. J. Andrews and Colonel Evans of the Strathcona Horse—to name a few of many.

There was no set program of entertainment. Those invited seemed quite content to laze around in the sunshine, lolling in hammocks or sprawling in deck chairs. The men had their pipes or cigars; the ladies nibbled chocolates, with the latest novel of Marie Corelli or Hall Caine to entertain them. They didn't indulge in cigarettes for in those days women who smoked in public were regarded as being a trifle "fast." As the evening shadows lengthened, family and guests would seat themselves along the river bank and watch the Red River flowing silently and swiftly northward. At times the surface was smooth as glass, a moment later it would be broken into a score of circles as fish rose to strike at the mayflies fluttering aimlessly across the water. And on both side of the river, whippoorwills called to each other, their clear notes softened by the distance.

On Sundays, churchgoers were driven to St. Andrew's or to the little church of St. Clement's parish. On week days the more athletic could always get a game of tennis at the Reids' or the Vaughans' or enjoy afternoon tea at Captain and Mrs. Robinson's home. These hospitable people had lived for many years in Selkirk, four miles distant, and held open house for their neighbours of Lower Fort Garry. Sometimes cricketers from Winnipeg played the Selkirk team on the Asylum grounds and our family and guests would watch the game and enjoy the tea provided by Dr. Young, superintendent in charge of the patients.

From time to time traders and factors from distant posts would make the trip to Winnipeg, by dog sleigh in winter or by York boat and canoe in summer. Some of them had not been "outside" for years; yet once their reports had been handed in and their business at the Company's head office completed, the majority of them were impatient to return to the quiet solitude of the North where the days passed at a more leisurely pace. "Too many people! Too much noise!" such was the verdict of one factor when asked if he enjoyed his rare visits to Winnipeg.

Macdonalds, McTavishes, MacFarlanes, McPhersons . . . their names sounded like the roll call of a Highland regiment. They were sturdy men, these officers of the Hudson's Bay Company. They had to be to survive the rigours of the long winters and to cope with sickness and accidents armed only with a few standard drugs and a medical manual.

They had some interesting stories to tell of the habits of the natives who came to exchange prime furs for the products of the white man. One veteran of the service whose trading post was within the Arctic Circle spoke of a custom observed by the Eskimos. When a baby died, the parents killed a sleigh dog and placed its body beside the grave of their child. They knew that their huskies could find their way home to their master's igloo no matter how far it might be, so they took this method of making sure that the spirit of the dead child would be safely guided on the long journey from this world to the next.

Another officer of the Company described how an Indian medicine man had entered an empty wigwam and how soon after the lodge had been violently shaken. Then the voice of the medicine man announced that a spirit had entered the tent and a second voice was heard which seemed to come from the top of the wigwam. This voice was high and shrill quite unlike the voice of the medicine man and spoke in a language only the witch doctor could understand. He asked questions of the spirit—as to where the men of his tribe should go to find game, what luck they would have in trapping and so forth. Finally the magician staggered out from the wigwam and announced to the Indians seated around the magic teepee what the future held in store for them. "It was an amazing performance," the factor declared, "and I haven't the slighest idea how the trick was performed."

Another story that sticks in my memory was told us by Chief Factor Roderick MacFarlane who described a 500

A group taken when the Governor-General, Earl Grey, was entertained at a luncheon party. Sitting on ground second and fourth from left are R. Chipman and the author; seated: Earl Grey with Primrose Chipman, and Countess Grey; standing: fourth from left, Mrs. C. C. Chipman, Commissioner Chipman, Margery Chipman, an A.D.C., Miss L. Murray, and the governess.

mile journey by dog team in the depth of winter. He and three others were bringing the body of a Company trader to Fort Simpson for burial in accordance with his wish expressed before his death. Mr. MacFarlane's written account of this eerie affair was printed in the September, 1939 issue of the *Beaver*, and more recently in *Northern Treasury*.

An outstanding event from a school-boy's point of view was the arrival of the Strathcona Horse, one summer. They pitched their tents close to the fort and for a week held field exercises which culminated in an attack on the fort. Bugles shrilled, carbines loaded with blank cartridges popped merrily and a "suicide squad" burst from a thicket close by and attempted to scale the walls . . . one succeeded and a defender practically blew him off the wall with a shot discharged at point blank range! About that time the bugles sounded "Cease fire" and the wounded warrior limped off to the medical officer to have his powder burn treated.

The day before the regiment returned to barracks a gymkhana was held. During the tentpegging contest Lieutenant Williams (a Major General in the first World War) was thrown from his horse and landed on the prairie with considerable force. My sister Edith, aged 13, had a school girl "crush" on the goodlooking subaltern and was very much upset over the incident. Indeed she scurried off to the schoolroom where she wrote her first and only poem. It began,

"My heart did almost fail me
When I did see thee fall
Without the old Fort wall . . ."

but this was as far as she ever got! My father took a less serious view of the affair. "I think he'll pull through," I heard him remark to my mother. "When I offered him a glass of whisky he opened his eyes, looked at the drink, and asked me if it was Scotch or rye!"

The Governor-General of Canada, Lord Minto, with Lady Minto and their two daughters, Lady Eileen and

The guests in front of the Commissioner's residence after the luncheon for Lord Minto. From left to right, seated: Mrs. R. A. Rogers, Lady Ruby, the Countess of Minto, Mrs. C. C. Chipman, Lady McMillan. Standing: Mayor Thomas Sharpe, Lady Eileen, Hon. R. A. Rogers, an A.D.C., Commissioner C. C. Chipman; Dorothy Chipman, an A.D.C., the Earl of Minto, Mrs. T. Sharpe, Edith Chipman, an A.D.C., Margery Chipman, Sir Daniel McMillan.

Lady Ruby, had luncheon at the fort in the summer of 1904. Lord and Lady Minto, their eldest daughter, guests from Winnipeg, and my parents were served in the dining room. The younger daughter, an aide-de-camp and I ate at a smaller table in the school room. I was nineteen at the time, very self-conscious and quite perturbed as to what on earth I should talk about. I needn't have worried. The young lady ignored me completely, addressing her remarks exclusively to the handsome A.D.C. To the best of my recollection his contribution to the table chit-chat were remarks such as "Not really, Lady Ruby!" and "Oh I say, Lady Ruby!" accompanied by peals of baritone laughter. Meanwhile I sat in sullen silence moodily toying with my food and drinking rather more champagne than was good for me. Luncheon over, the Mintos, their daughters and staff were photographed and departed, trailing clouds of glory, by the C.P.R. special train which had brought them down from Winnipeg.

A few years later, Earl Grey who succeeded Lord Minto was entertained at a similar luncheon party at the fort. He and Lady Grey were friendly people, I recall, and had the happy faculty of making even the youngest of us feel completely at ease. My sister Primrose, not more than seven or so at the time, was especially attracted by the Governor-General, and the liking seemed to be mutual. At any rate when the time came for the photographer to pose the distinguished visitors, Earl Grey insisted that "the pretty little girl" be photographed perched on his knee, an invitation she gladly accepted.

In 1911 my father retired from the Hudson's Bay Company after 20 years service and took up residence in England.

Gone forever are the days when a boy could scramble down the river bank with a fishing pole in one hand and a bottle of grasshoppers in the other and return in less than an hour with half-a-dozen plump goldeyes. Gone too are the crisp autumn mornings when the same boy, gun under his arm and setter at his heels, could flush a covey of prairie chickens within a few hundred yards of the fort walls. Today there are more Buicks than buggies to be seen at the Lower Fort, more Pontiacs than ponies. Bathtubs and rainbarrels have been replaced by showers and hot and cold running water. Kerosene lamps and the wood stove are now relics of the past. The old order has changed, and for the better.

Lower Fort Garry has long since passed the century mark but thanks to the scrupulous care bestowed on it, it is safe to say that for many years to come it will continue to serve as "a vigorous and enduring monument of bygone days and ways." ◆

Mr. Morgan is the author of eight books, most of which deal with northwest history. The most recent are "The Last Wilderness." "The Dam," and "Skid Road."

MACHINES TO THE RESCUE!

by Murray Morgan

When news trickled south that the Klondikers were starving, amateur inventors rushed into print with some pretty fantastic suggestions.

DURING the winter of 1897-98, fear was felt for the safety of the men who had rushed away earlier in the year to seek their fortune on the Klondike.

Food supplies were limited at Dawson, the main supply point for the Klondikers. Unusually low water and an early freeze on the lower Yukon kept river steamers from reaching Dawson with winter rations. Territorial officials warned that newcomers must bring in food to last them through the winter or face starvation. Food prices, high from the start, soared until a grocer complained to a prospector, "Don't ask me for flour. If I had a barrel of flour I'd buy a gold mine."

A rumour trickled south from Skagway that a merchant who had reached Dawson overland with a small supply of goods was horsewhipped when the hungry miners found his cargo was "only whisky." That story did as much as any other to scare the folks at home. They reasoned times must be tough indeed if sourdoughs rebelled at hard liquor.

Several relief expeditions were organized, none of which reached Dawson until after the thaw the following summer. When they did arrive they found the Klondikers healthy enough. They were tired of a diet of beans and flapjacks but far from starving, and they expressed righteous indignation at the gossip that portrayed them as abandoning alcohol for proteins.

The great starvation scare started inventive juices flowing in the minds of several northwest Edisons. Many and weird were the methods proposed for reaching the ice-bound Klondike in mid-winter.

Among those frozen in at Dawson City was the sweet singer of the Sierras, Joaquin Miller, who had been sending out some pretty fanciful newspaper stories on the charms of the Klondike Trail.

Joaquin had a brother, George Miller, who lived on a farm near Eugene, Oregon. When George heard that Joaquin was in a city facing starvation he came up with a suggestion which showed, if nothing else, that the poet had no monopoly on the Miller family imagination.

George proposed that a hot stove, built like an asphalt roller, be dragged over the snowdrifts covering the trail between Skagway and Dawson. The snow would melt, then freeze smooth, he told reporters, and "the long and weary way to the Klondike country will become a continuous series of skating rinks and toboggan slides, over which dogs and sledges can jog merrily along in the brilliant glow of the aurora borealis, carrying food and drink to the suffering miners, and return laden with gold."

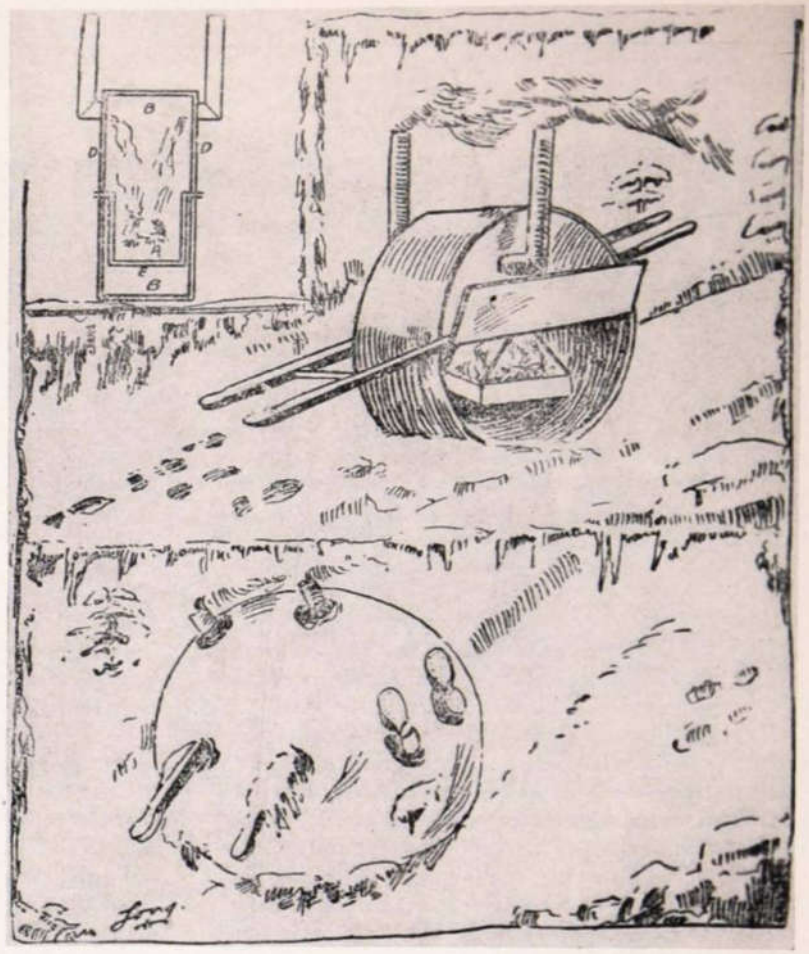
Miller argued that "five or six sturdy men, with a properly constructed furnace, can make ten miles of frozen road per day. It would be solid, firm and endure until the sun would melt next spring and enable thousands to reach Dawson with comparative ease and comfort."

In a letter to the Pacific Coast Steamship Company, he offered to put up $500 of his own money and help with the work if they would back his project for a mobile hot-plate. Wiser heads prevailed.

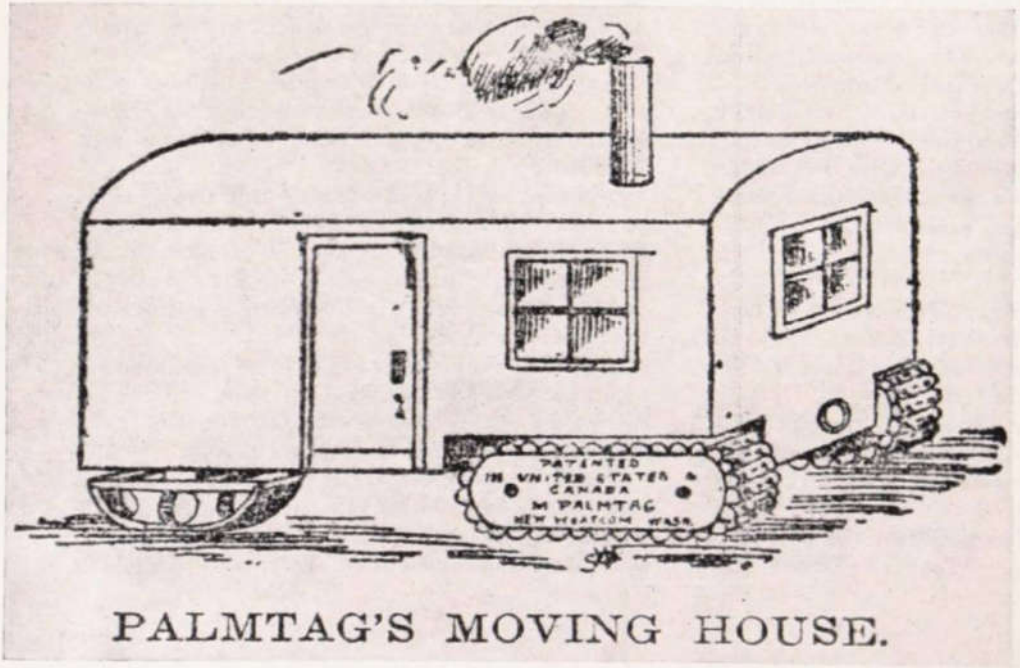
D. H. Sterns of Portland took out patents that winter on an amphibious, steam-driven toboggan, which he claimed would do everything but give milk. He predicted that his invention would not only relieve starving Dawson but could go on "and make a trip to the North Pole a comparative pleasure excursion."

Sterns' Terrain Flattener was to be as amphibious as a snow goose. It would have wheels to run on land, fins and centreboard and paddlewheel for water, treads for snow, and a winch and rope for hauling itself up cliffs.

The sled was to be twenty feet long, thirty-three inches high and twenty-six inches wide, with a compartment in the rear high enough to permit installation of a 2½-horsepower gas engine. The forward part of the sled would be

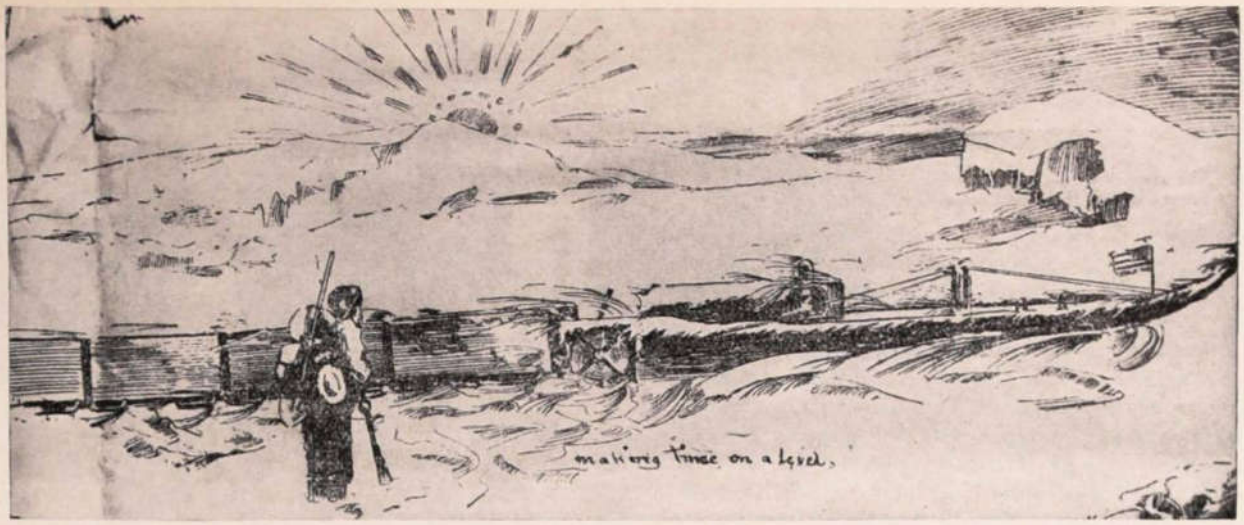


Miller's ice-trail machine was designed to make the Klondike trail "a continuous series of skating rinks and toboggan slides." At the bottom is the contemporary artist's idea of what would happen if it ever got away.



PALMTAG'S MOVING HOUSE.

This steam-driven caterpillar sled was designed to support a house 24 feet long and 7 feet wide.



Stern's steam-driven toboggan was pictured going down the frozen Yukon towing a long string of trailers. He claimed it would do everything but give milk.

divided between a hold for storage and sleeping compartments for the crew.

Sterns proposed that each steam sled tow a string of trailers behind it. One locomotive, he said, could pull twenty-five trailers, each carrying 800 pounds of provisions for sale, besides enough food for the crew for the round trip.

It was Sterns' idea that the steam sled and trailers could be loaded while ashore, then driven aboard freighters for the trip north. At Skagway, he contended, they could be lowered over the side, thus saving longshore charges. He pictured them thrashing their way ashore, then waddling up the valleys and down the rivers to Dawson.

Sterns felt that on the first expedition there should be three steam sleds and seventy-five trailers, "so that if one machine breaks down the others can get through." It was the only time doubt seems to have entered his mind.

In talks with reporters Sterns presented a warm picture of the winter snow voyage. "The trail has to be but twenty-six inches wide, and can easily be broken and kept open," he said. "The theory of conquering the passes is to follow up the water courses, keeping always in the bottom until the head is reached.

"When streams get large enough so that the ice is broken and rough, the working crew of sixteen men with each locomotive are to go ahead with axes and smooth the ice enough to make the passage of the machines easy. Travel is to be continuous . . . as the men are to work and sleep in shifts, the dynamo necessary to run the engine furnishing light."

The inventor claimed that the trip from Skagway to Dawson could be made in ten or fifteen days on the first trip. After that, he thought, it would take four days or less.

The Klondike Relief Committee of the Portland Chamber of Commerce wrote the inventor saying, "We believe the plan to be the best thus far proposed for Arctic travel by locomotive." Which is not to say they thought it would work.

The Manufacturers' Association of Portland also wrote Sterns, assuring him, "The manufacturers of this city can construct the machines in any quantity needed." There was a hitch, though. The manufacturers expected to be paid. On that obstacle the project foundered.

Sterns' steam sled was a primitive contraption when compared to the Moving House proposed by M. Palmtag of New Whatcom (now Bellingham), Washington, who patented a steam-driven sled big enough to support a house seven feet wide and twenty-four feet long. It was designed to carry eight passengers and a crew of two, "comfortably."

Palmtag pictured his house moving up the mountainside on wooden treads twelve feet long and sixteen inches wide. He estimated his contraption would weigh three and a half tons, and that it would sink only six inches in the snow. The inventor admitted that "the ice on the Yukon will form some impediment but no bar, since ten men will be with the machine to clear the way."

A company was formed to build machines and transport provisions to Dawson at once. But before any stock was sold the summer sun had already brought relief to Dawson.

The most remarkable suggestion of all was that of Jefferson Dorsett, a Chicago man making his headquarters in Tacoma. He proposed the construction of hot air balloons "of sufficient amplitude to support a ton." These would be carried folded to the base of the White Pass or the Chilkoot Pass, and then inflated. Hawsers would be run from the balloon to the cargo. Then, said the inventor, "the unencumbered argonaut can gaily climb the pass, towing his gear and duffle as a boy might fly a kite."

What would happen if the balloon lifted the jaunty sourdough off his feet, or if the wind were blowing from the north, its customary direction at Skagway, Dorsett did not say. He merely announced that a Klondike Ascension Company was being formed to produce the balloon. And with that announcement he disappears from history. ◆

The arms of Great Britain and France during the Stuart regime.

WHICH JOLLIET?

by E. E. Rich

QUAKER Charles Bayly, the first Bay-side Governor sent out to James Bay by the Company, was a vital but elusive character. Going out on the first chartered voyage in 1670, he remained in the Bay with only one break until 1679. During his period in office he established the Company's trade and explored its territories as far as sea transport in the Bay would allow; he confirmed the friendly relations with the Indians which Gillam and Groseilliers had established on the 1668 voyage; and he managed a working arrangement with the French of Canada which became the envy of later generations. So much is clear. But the details are obscure, since there is a gap in the Company's minutes from 1674 to 1679, the Letter Books do not start until 1679, and the first post journals and accounts do not begin until 1692.

Of the whole important period of Bayly's rule by the Bay, 1679 is probably the most important single year. But it is also the most obscure, especially on the vital point of his relations with the French. It was the constant allegation of the Company that Bayly and Governor Frontenac of Canada "did conciliate a good intelligence and amity," that they managed their relations with mutual regard and understanding. For a variety of reasons there was much truth in this. The threat to the French beaver trade implied by the establishment of the English Company was as yet hardly realized; the French Crown was not anxious to create difficulties for the Stuart dynasty; and Frontenac as governor of Canada was not at all sure that he stood unreservedly behind the fur traders in their desire to expand northwards. On the whole, his sympathies lay with the expansion southwards, with Jolliet's voyage down the Mississippi, with La Salle and the Recollet brethren, rather than with the Jesuits and that section of the merchant community headed by Aubert de la Chesnay, which wished to send ships into the Bay. But even Frontenac could not accept the English intrusion into the fur trade without protest. The little Jesuit priest, Albanel, was sent to the Bay in 1671-72 with instructions to take possession in the name of the French King, and Frontenac sent him again in 1674, this time to entice Groseilliers and Radisson back into French service.

Again, in 1679, Frontenac sent a French mission overland down the rivers to the Bay. This time it was the explorer Louis Jolliet who went north with orders to investigate the English position and report back to Quebec (*Beaver*, Dec. 1947, p. 12). Jolliet left an account of his journey, of his kind reception by the English, and of the conclusions which he reached. The impression made by this French account is that the English had already begun to "sleep by the frozen sea," that they were kindly, unsuspicious, and apathetic, so that French knowledge of the woods and of the Indians placed it within their power to stifle the English trade whenever they wished. "Whenever it shall please His Majesty to wish to expel the English from this Bay in order to be Master of all the Country and the Beaver trade, it will be Easy," wrote Jolliet. He was convinced that encirclement from the south would gradually starve out the trade of the English posts.

As against Jolliet's account of French knowledge and purposefulness stand the simplicity and apathy of the English. The French were entertained for a couple of days, they were shown the post, were told all that they wanted to know, and were given every chance to assess the English strength and weakness before they were helped on their way back to Canada. The simple gullibility of the whole performance was of a piece with the Governor's Quakerish

Prof. Rich of St. Catherine's College, Cambridge, is the general editor of the Hudson's Bay Record Society.

Was it the explorer of the Mississippi who was convicted of trading furs to the English on James Bay?

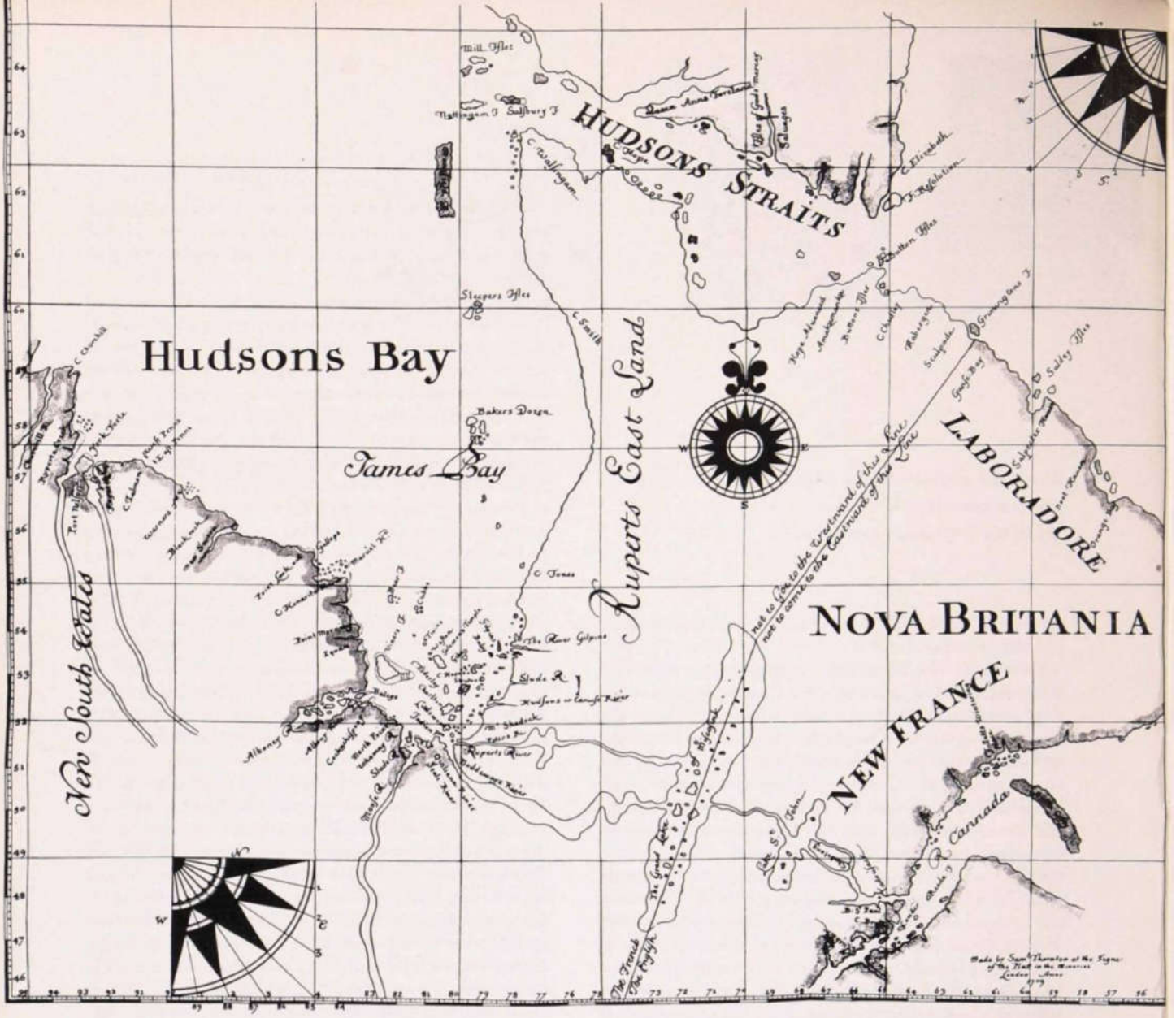
greeting of Jolliet: "Welcome, Sir. You are here in peace and have nothing to fear."

There is no English account of this strange episode of 1679; and that is a great pity, for Charles Bayly was not at all the sort of simple soul whom Jolliet portrayed. He was a shrewd trader who got the furs for his Company, and who drove a profitable trade on his own account too. He disposed of the Company's property in a way which baffled his successor and led to charges of embezzlement, and his own account with the Company took years to straighten out. Even from Jolliet's own narrative it is evident that Bayly was one of those apparently simple men who really have a very shrewd notion of what they are doing all the time. He made the Frenchman an offer of a thousand francs in salary and a thousand livres in pension if he would come over to the English Company. It might have tempted Jolliet, but Bayly must have known that there was very little chance of the Company standing behind such an offer if it were accepted, for his own salary as Governor had been only fifty pounds a year until the previous summer, when it had been raised to two hundred pounds. The Company was short of money, no dividend had yet been paid, and such an offer was pure salesmanship. Bayly told Jolliet, too, that he was in touch with the Assiniboines and had sent them presents, and that he could get all the furs he wanted; and he relied a little on his imagination when he described the three forts which he had in occupation and the fourth which he was preparing. For Charles Fort in Rupert River and Moose River were the only two effective posts in 1679; a little trade may have been started at Albany but the place was not in regular occupation, while New Severn was still far from settlement. All four posts were marked in by Jolliet on the map of the Bay which he drew on his return to Quebec, and Bayly convinced him that with another six years of such trade, as he boasted, the English would master all the commerce of Canada.

It is obvious that there is another side to the story of French purpose and perception over-reaching English simplicity. A narrative from the English point of view would redress the balance; and there might well have been an English narrative of this episode, for Thomas Gorst was at Rupert River when Jolliet arrived. Gorst had gone to the Bay as accountant with Groseilliers and Gillam on the *Nonsuch* voyage of 1668, and his accounts help to build up the story of that voyage. Again in 1670 Gorst went out to the Bay, in company with Governor Bayly, who made him his secretary. Gorst's Journal is a valuable supplement to the meagre official narratives; it was largely used by Oldmixon in his attempt to reconstruct the story of Bayly's governorship. Gorst returned to England in 1675, but the Bay had not seen the last of him. In 1674 Bayly had been superseded by Governor Lydall, but he had been unable to leave the post of whose command he had been deprived and was forced to spend an invidious and starving winter there with his tactless and incompetent successor. In 1675, when shipping became possible, it was the new Governor, sick of his winter in the Bay, who took ship for England. Bayly stayed on, lest the post at Rupert River should be deserted entirely. But he had only four men left with him, and Thomas Gorst was not one of them. Bayly's second period as governor is therefore not illuminated by Gorst, for although the latter shipped again to the Bay it was as purser on the *Prince Rupert*, not as a member of the post. In that capacity Gorst was present when Jolliet came down the river in 1679, for the *Rupert* had wintered in the Bay as a guard-ship and could be seen off-shore. It was, for a virtual certainty, purser Gorst who told Jolliet that he could carry on a conversation better in Latin than in French. But he left no account of the episode.

Despite this lack of English evidence, some new light has been cast on the Quaker and his relations with the French, but it is from French sources.

When Louis Jolliet started from Quebec in May, 1679, he had with him his brother Zacharie, five Canadians and two Indians; he was later joined by Father Antoine Silvy and another voyageur, but the party split at Lake Nemisko and only one canoe went on to the Bay. The next occasion, after 1679, when the name of Jolliet appeared in the history of the Bay, was in 1685. Then a serious French attack on the Bay-side posts was under discussion. Governor Denonville was soon to send De Troyes, the Le Moynes and their expedition, down the rivers to capture and extirpate the



This map of 1709 shows roughly the water routes between Quebec and Rupert's House. Lake "Miscosink" is Mistassini. The map was sent over to Holland by the Governor of the Company to help in the negotiations leading to the Treaty of Utrecht.

English posts. At that juncture, in 1685, Zacharie Jolliet thought he would himself command the expedition, and he sent friendly warnings to Hugh Verner at Rupert River and to Henry Sergeant at Albany to get out before destruction fell on them. He was in charge of a post which the French had set up at Lake Nemisko, and he sent to the English a copy of his orders from the governor of Canada, orders which bade him prevent the Indians from going down to trade by the Bay and to warn any who protested that he was acting by command of the French King. He was, in fact, sent to carry out that plan of encirclement which his brother had advocated in 1679. In a way he was the spear-head of the French attack, and it is astonishing that in such a position he should have given the English a warning. But Zacharie wrote warmly of the hospitality which he had received from the English in the past, "having had the Honor to see Mr. Bayly Drank Eaten and Lodged Two or Three nights with him in your Fort, whereof he did only not make us Master's." His warning was merely advice to his friends to get out while there was time; it did not compromise the French plan or hold out any hope that it might be frustrated.

Neither of the English posts profited by Zacharie's warning, treating it merely as French guile. Both Rupert

River and Albany were unable to put up any resistance to De Troyes when he came upon them, and the affair of Zacharie's letter has attracted little attention, on the assumption that the hospitality to which he referred was already explained by the visit which (it was assumed) he had made to the Bay with his brother Louis in 1679.

But Zacharie Jolliet could not have completed the journey to the Bay with his brother. There is evidence that he made a separate journey which was incompatible with his completing the canoe voyage. Louis Jolliet did not get back to Quebec until the last week of October in 1679, a date at which it would have been quite impossible for him to have taken ship and sailed around Labrador into the Bay before freeze-up. Yet there is definite evidence that one Jolliet did so.

In November, 1681, Frontenac made a report to France on a proposal which Aubert de la Chesnay had put forward, to send shipping into the Bay. De la Chesnay was in fact, at that time, concluding his arrangements to send Radisson and Groseilliers, who had left the Hudson's Bay Company, into the Bay, to anticipate the English in the settlement of Nelson River—a plan which matured in 1682. Among other criticisms which such a proposal had to meet was one that De la Chesnay might only trade his furs to the English in the end, for that was what he had done on a previous occasion. It was on this point that Frontenac wrote, and he wrote simply to recount what had happened. A certain La Lande, half-brother of De la Chesnay, and a Jolliet, his nephew (said Frontenac) had taken a ship, and under pretext that they were going fishing off the island of Anticosti, had sailed her into the Bay, had traded furs with the Indians, and had then traded them with the Governor of Hudson's Bay, entered into an arrangement with him and received presents from him. On their return to Quebec in March, 1680, they were convicted, were fined two thousand livres, and had their ship confiscated. Later their fine was reduced to five hundred livres and De la Chesnay re-acquired the ship, in which La Lande and Jolliet went on a second voyage, returning to Quebec laden with furs and merchandise.

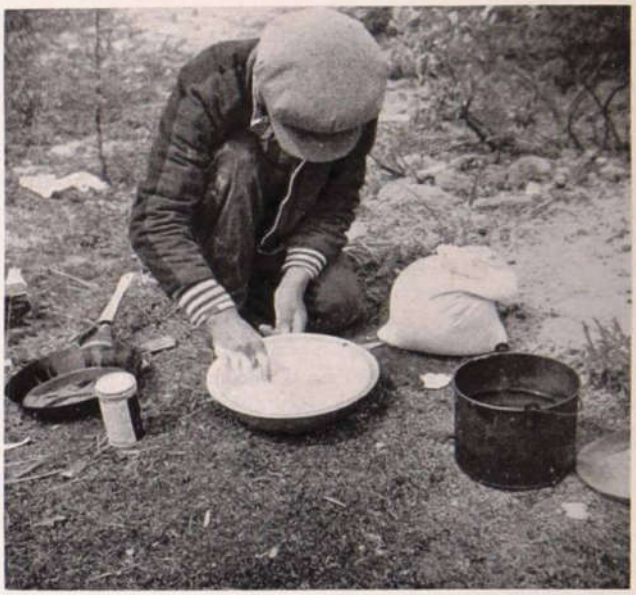
Whatever the possibilities of finesse in the interpretation of this report (and some phrases are equivocal), it is quite certain that Frontenac was reporting, simply as a fact, the verdict of the courts of Quebec, that "*Jolliet neveu de la Chesnay*" had been so convicted. No christian name is given, but this cannot have been the explorer Louis. This must be Zacharie Jolliet, who must have returned from Lake Nemisko in the summer of 1679 in time to take ship in the early fall, to winter in the Bay and to enjoy Bayly's hospitality after the departure of his brother, getting back to Quebec in the following spring. He must have followed hard on the heels of his brother, for he must have been away from the English post before the end of August, when the *John and Alexander* brought the morose and meticulous John Nixon to replace Bayly. The sort of hospitality and friendliness to which Zacharie Jolliet referred in his letter to Hugh Verner had no place in Nixon's ideas; and if Nixon had received a visit from a French ship it would surely have been mentioned in his report of the next year. So Zacharie must have left before Nixon came. His relations were (as he said, in his letter to Verner) with Bayly, and the affable but shrewd Quaker traded his furs from him.

Such an episode makes one wonder how many such visits Bayly suffered, how many Frenchmen he managed to seduce into trading with the Company. During his time Eustache Prevost and Etienne Leclerc, two unaccounted Frenchmen, were sent to London; and when Louis Jolliet wrote to Bayly he made mention of the "several Frenchmen who in recent years had returned from your place with all sorts of Praise for the good reception you gave them." It begins to appear as though the good relationship which Bayly maintained with Frontenac was not so one-sided as it might seem. There were probably more visits, and more profit to the English, than can now be proved. Certainly in 1679 not one but two Jolliets visited Rupert River—and one went away sadly misled about the English posts while the other left his furs in English hands but took away convictions which later led him to betray the French plans. ◆

Rupert's House in 1867, from a photograph by Chief Trader Bernard Rogan Ross. Compare this photo and the map opposite with their counterparts in Mr. Francine's article.

1. Into a tin mixing basin go three or four pounds of flour. Measurements appear to be carelessly estimated, but the finished product varies little from one batch to the next.

2. After stirring in a lidful of baking powder and a little salt, 2 tbsp. melted lard and 1 pt. hot water (not hot enough to start the powder working) are poured into a hollow in the flour.



4. Taking one of the lumps of dough, Alfred presses it into a well-greased frying pan so that it touches the edges all round. At this stage it should be about half an inch thick.

5. He props the pan facing a bed of hot embers so that the heat cooks the bannock from the top. He turns it 3 or 4 times and bastes it with more lard to form a thick brown crust.

3. The dough is kneaded thoroughly — squashed flat, folded, and squeezed again — and finally torn into three or four pieces of equal size, ready for cooking in front of the fire.

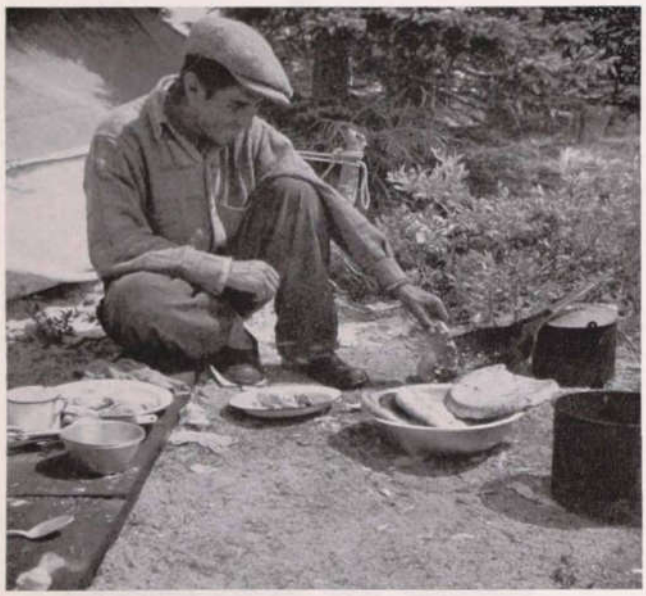
BANNOCK

WHITE man's flour, prepared in one form or another, has figured in the Indian diet for quite some time. With the introduction of baking powder, flour in a highly palatable form called bannock began to come into its own as a staple in the north. Fish, wild fowl, hare, beaver and big game come and go with the seasons, but the year round, in every cabin, tent and teepee, there is bannock.

Bannock is ideally suited to the Indian style of living. A good sized family can travel for two weeks on 50 lbs. of flour and little else. The cooking of bannock requires only an open fire and a frying pan. Though it may take two hours to develop a gastronomic masterpiece, some hungry canoeists once clocked an Indian at 20 minutes from the time the canoe touched shore to the moment the bannock was ready for eating.

Making bannock has become an essential craft which, like syllabic writing, is now taught early to the children, along with native arts. In the home, women usually do the cooking, but men out at their traps, or hunting, are equally good bannock makers. Recipes vary to a minor degree among Indian bands, and even among families in the same village. Here is how Alfred Mitchell, of Fort Severn, on the coast of Hudson Bay, makes bannock.

by John Macfie

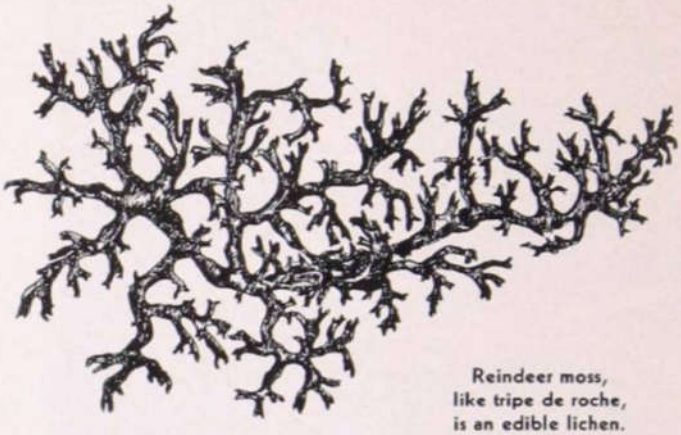


6. The finished product, an inch or two thick, is like an extra large baking powder biscuit. Hot bannock dipped in melted lard, with boiled fish, and tea, is familiar fare in the North.

FOOD FROM THE FLORA

by Bradford Angier

Skunk cabbage in early spring is delicious—in spite of the name.



Reindeer moss, like tripe de roche, is an edible lichen.

The seeds of the green amaranth can be used to improve bannock (q.v.).

The leaves and stems of miner's lettuce can be boiled, or eaten as salad.

ONE day you may be boating down the Peace River near the start of its more-than-2000-mile journey, inland to Great Slave Lake and thence as the Mackenzie to the Arctic Ocean. Soon after the headwaters of this wilderness highway mingle in the Rocky Mountain Trench, the river turns abruptly eastward to flow through the backbone of the Canadian Rockies. If you will watch the left shore after chuting through the minor turbulence known as Finlay Rapids, your eyes will likely as not catch the platinum gleam of Lost Cabin Creek.

Here it was, at the turn of the century, during those apical days on the world's gold-fever chart, that four prospectors shared the still-standing cabin from which the stream has taken its name. Their grubstake dwindling, three watched with growing helplessness the first of their number die, by which time the survivors themselves had become so feeble that they lacked the vigour to open the frozen ground outside.

They buried their companion in the only spot they could find earth still loose enough to dig. A second "gravel-puncher" died and had also to be buried. Before the fourth succumbed, he had by himself managed to scoop out enough of a grave so that a third emaciated body could join the others already beneath the cabin floor.

Yet as you will be able to testify from what you can see while boating past Lost Cabin Creek, and as I can substantiate from having lived in the vicinity for years, the wilderness there abounds the year around with wild edibles.

Hundreds of wild foods enhance North American fields and woodlands, mountains and canyons, deserts, shores, and certainly the swamplands. The inner bark of the familiar *birches* is pleasantly sweet and sustaining. Even birch sap is refreshing. As for young birch leaves and twigs, the soft formative tissue between wood and bark, and the thin bark covering the roots, any of these steeped in hot water make a favorite backwoods tea having the perfume and flavour of wintergreen.

The lodgepole and other *pines* have an eatable inner bark that is preferred fresh by some and sun-dried by others. There are even those gourmets who claim it is at its best only when scraped from the south side of a young tree while the spring sap is rising.

The new emerald tufts that brighten the various conifers in the spring are best for the spicy brew known as *spruce tea*. One way to make this beverage is to push as many of the youngest available needles of such evergreens as the pine, spruce, fir, and hemlock into boiling water which is then set off the fire to steep. The drink will both prevent and cure scurvy, although for this purpose it's better to eat the starchy needles directly. The tender young ones have a mild and pleasant flavour and chew up quickly. *Rose hips* also can be a particularly valuable part of a wilderness diet because of their abundant Vitamin C which both averts and cures scurvy.

The younger one is, the more irresistible the various *wild cherries* seem to be, especially when raw. Adults come to prefer gathering the more astringent of these green for jelly making, and ripe for boiling with an added sweet for table syrup. *Elderberries* are fairly widely recognized. The dry, bland, reddish *bearberry* is edible although practically tasteless.

The salad plants and potherbs growing wild on this continent are particularly abundant. For example, the entire young plant of the *dandelion* is relished raw in salads and, especially when older, after it has been boiled just enough to render it tender. To many the clean bitter tang is stimulating. Those who do not care for it can discard the first water and finish the cooking in fresh fluid. I've also gathered dandelion roots in the fall, allowed them to dry, roasted them in the oven, and finally ground the shriveled dark shapes remaining. It is a widely used coffee stretcher. Put in cold water and slowly brought to a boil, it is not a bad wilderness coffee substitute, either.

Even more generally known in this respect are the correspondingly processed roots of the closely related *chicory* whose similarly prepared and eaten young leaves, forming about the base of the plant, are often mistaken for dandelion. From its stout taproot chicory develops into a tall, widely known weed with large, usually blue flowers.

Some of the common edibles, such as *skunk cabbage*, are plagued by psychological handicaps similar to that which bans roast muskrat from many a table. Actually the succulent dark meat of the muskrat is pretty hard to equal . . . when served as musquash or swamp rabbit. And so it is with many wild greens. Young skunk cabbage, for one, becomes tender and blandly delicious when boiled in several changes of water. The skunk cabbage, which grows in moist and usually shady areas, early in the year pushes up its shell-like sheath in which rises a fleshy spike embedded with numerous tiny flowers. Veins are very evident on the large, succulent leaves which are best for eating when they first appear. An emergency flour, incidentally, can be made from the rootstocks which are fleshy and threaded with many side-rootlets. These roots are dried and ground, their somewhat peppery taste diminishing in pungency after a week or two. Indians hurried the process by first roasting these intact in pits.

Pigweed is to many palates the pick of the wild greens, especially when dished up as *lamb's quarter* which is one

Mr. Angier lives part of the year in California and part near Hudson's Hope on the Peace River.

Drawings by Dy. Woolgar

of its more formal names. Its widespread prolificness and mild flavour make it one of the more important wild foods. The stem is covered with longish, pale green leaves with irregular edges, from whose shape has come the name of *goosefoot*. The small green flowers appear in long, thick clusters that later turn to tiny dark seeds.

Stalk, leaves, flowers, and grains of the pigweed are all nourishing both raw and cooked. Even when a small vegetable garden is in full production near our home in the woods at Hudson's Hope, British Columbia, we often bypass it to gather instead young pigweed thriving nearby.

The seeds, like those of the *green amaranth* which is also called pigweed, occasionally help to relieve whatever monotony there may be in bannock and other breadstuffs, lending them a caraway-seed effect. They can also be dried and ground for use as meal.

The widely distributed *nettle* is one of the most delicately flavoured of all greens. Leather gloves and a knife take all the sting out of gathering them, and they are at their best when only a few inches tall. You can get along all right, too, by using two sticks as tongs. Nettles, you might expect, would require lengthy cooking. However, the young shoots need only be dropped into a container of boiling water that may then be set away from the heat. As soon as the dark greens have cooled enough to be eaten, they may be forked out and served.

Milkweed, which in the fall bursts its long rough pods and sends its seeds soaring in white fluff, is at its best as a food in the spring. You'll probably want to change the boiling water several times to eliminate the milky sap (from which, incidentally, a sort of rubber can be manufactured). After the milkweed has simmered until tender in a final portion of salted water, drain and serve with some edible grease such as bacon drippings. The flowers are good, particularly when you're hankering for something sweet. Later on, the young seed pods are also boiled and eaten. Indians relished the cooked roots.

Miner's lettuce, a salad plant whose crisp leaves and stems may also be boiled as greens, is notably easy to distinguish. Anyone who does not know it already, has only to look for a small green plant with flower stems growing from a short mass of leaves at ground level. The clinching feature is that part way up each stem a pair of leaves grow together so as to form a sort of cup through whose middle the stalk continues.

Wild growths are not anything to take chances with. Some, like the apparently innocuous *buttercup*, are poisonous when taken internally.

No antidote has yet been discovered for certain poisonous *mushrooms*, which are all the more lethal because in many cases no ill symptoms are manifested until half a day or so after eating. The only poisonous wild growth in the Arctic happens to be a mushroom. Because at best mushrooms anywhere are extremely low in caloric value, it is a sound idea to avoid them entirely as an emergency food unless you already know them well.

On the other hand, some of the unlikeliest weeds can be safely eaten by man. The young stalks of both flowers and leaves of the common *burdock* may be peeled and devoured either raw or boiled. *Russian thistle*, the West's most familiar tumbleweed, boils up into a savory green if gathered while it is just coming up.

Then there are the fruits and fleshy segments of the North American varieties of *cacti* which, once they have been unarmed, lend themselves surprisingly well to every sort of table use from serving raw to roasting and even frying. These are found not only in the desert but in dry and rocky localities throughout the continent and in sandy soil even along such northern rivers as the Peace beside which I've lived for most of the past dozen years. Especially in arid regions, the sweetish watery sap in a few of the larger plants is enough to be vital in emergencies.

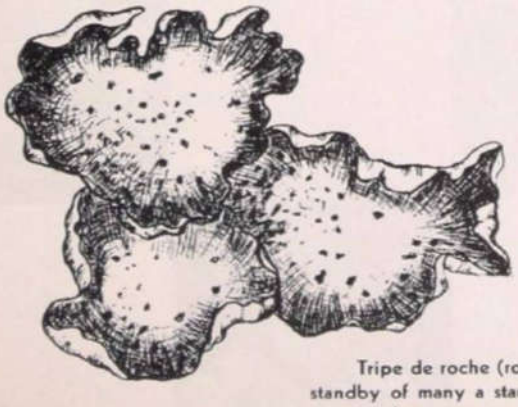
Perhaps the most widely known of the wild foods of the far North is the lichen known as *rock tripe*, whose habitat reaches into the southern states. Rock tripe resembles a leathery dark lettuce leaf, up to about three inches wide, attached at its center to a rocky surface. Unless the day is wet, rock tripe is apt to be rather dry. It can be eaten raw, but much of the time users prefer it boiled to thicken soups and stews.

Reindeer moss, whose range also extends into the United States, is another edible lichen. It resembles moss, however, being a low greyish-green plant with a quantity of many-branched stems instead of leaves. *Iceland moss*, another eatable lichen and not a moss, is found as far south as the States. It is comparable to reindeer moss, being a brownish green plant whose numerous flat branches turn in to create a tube-like effect.

A bitter lichen such as Iceland moss is first boiled or soaked to remove the cause of the bitterness—an acid which although not poisonous, is sometimes nauseous and may cause severe internal irritation. After being dried, the lichen is powdered, perhaps merely by being rubbed between the palms. The resulting flour is sometimes used to stretch ordinary flour. It is often utilized "as is" for making breadstuffs. I like it in bannock. The flour is also resoaked and then boiled to gruel-like and jellylike consistencies which by themselves are short on taste but surpassingly long on nourishment.

These few notes go to show that food, free for the taking, is abundant in the Canadian wilderness, if only one knows what to eat, and how to eat it. ◆

Lamb's quarter
is considered the pick
of the wild greens.



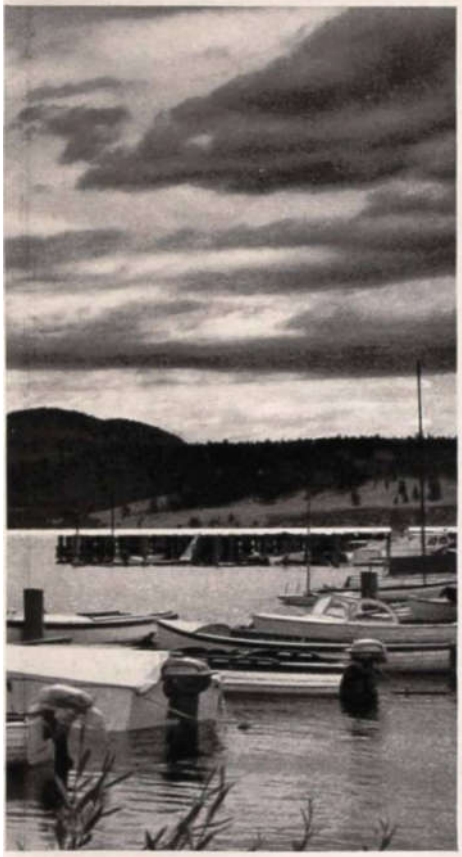
Tripe de roche (rock tripe),
standby of many a starving explorer,
can be eaten raw or boiled.

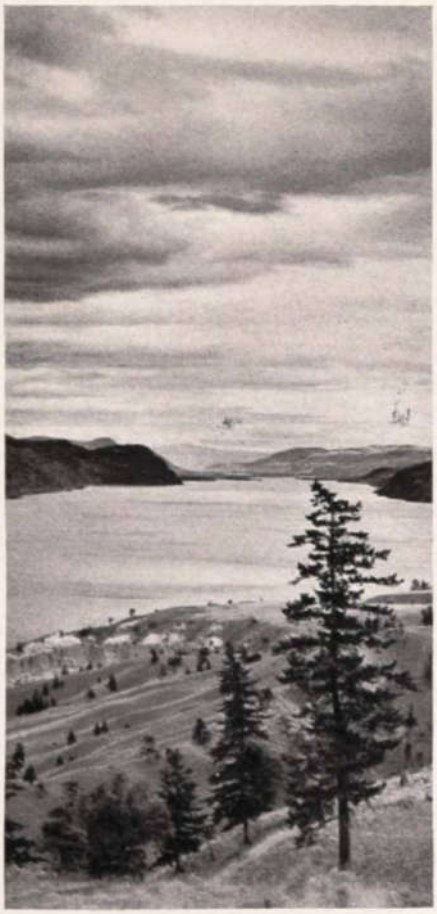
The young leaves of the
blue-flowered chicory are edible,
while its roots are used as a
coffee substitute or stretcher.

DW.

PEOPLE OF THE INTERIOR

Between the Coast Range on the Pacific and the mighty Rockies is the dry, sunny, Interior Plateau of British Columbia—country of fruit growing and irrigation farming; of ranching, lumbering, and mining. Country of the Indians and of settlers from Britain and China, from Holland and Japan, from Sweden and Russia, and other lands.





PHOTOGRAPHS BY ROSEMARY GILLIAT

PEOPLE OF THE INTERIOR

A carefully tended garden that produces a variety of vegetables as well as flowers. The orchard is on the hill slope beyond.

The end of the wil
twig pulls strongly
downwards, despite
firm grip, as the wat
witcher seeks water.

A young man handles timber at a planing mill as planks slide along a conveyor belt.

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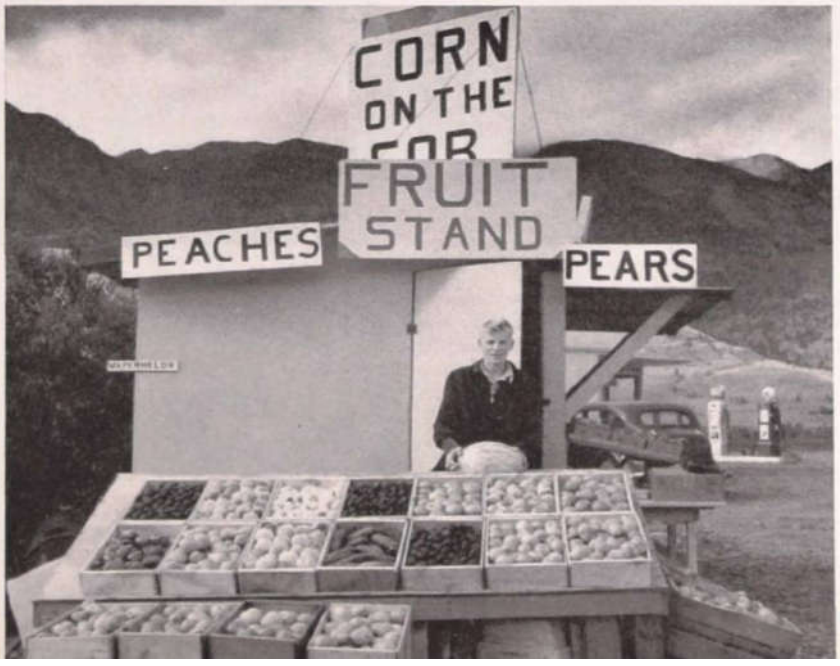
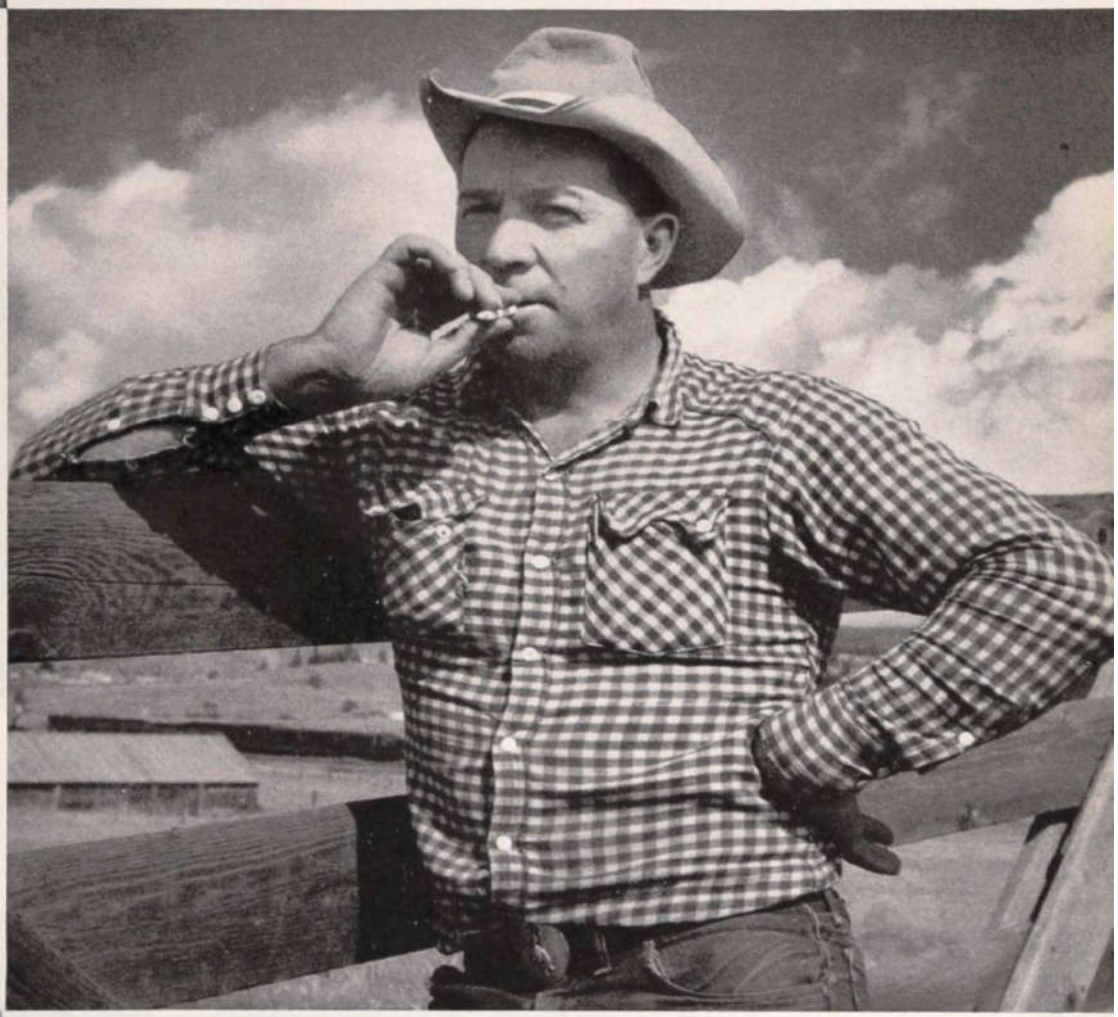
Fruit and vegetables are sold at stalls beside the highway.



Doukhobors, whose orchards and vineyards thrive on land they cleared and irrigated, singing at the grave of their leader, Peter Verigin.

Cattleman of the Cariboo country. He was once named the best all-round cowboy in the North American championship.



PEOPLE OF THE INTERIOR

Cowboys are never far from their mounts in the Cariboo where ranchers raise cattle and sheep on the rolling grasslands.

One of the early farmers, who cleared his 260 acres single-handed with an axe, and built the barn that stands beyond his clover field.

The market gardener. He takes the produce from his 45-acre garden to town daily. The land is watered from flumes on the hillside.

PEOPLE OF THE INTERIOR

ARCTIC BRIDE

by Wanda Neill Tolboom

Part of a chapter from the recently published book of that name. Reprinted here by arrangement with the Ryerson Press of Toronto.

Introductory note: *In 1946, Miss Wanda Neill left the prairies of Manitoba and boarded the* Nascopie *at Montreal. Her destination was Povungnetuk, a small Hudson's Bay post north of Port Harrison on the east coast of Hudson Bay, where she was going to marry Wulfert Tolboom, the manager.*

The author of a number of articles on arctic life, and of a book about an Eskimo boy, Mrs. Tolboom has now written a book about her first year in the Arctic, from which the following is taken. The story opens at Wolstenholme, the Company's first arctic post, at the northeast corner of Hudson Bay.

DRAMATIS PERSONAE

Dedie Keightly,	who was also going to get married at Port Harrison.
Sam Dodds	of the Department of Transport.
Shorty Tinling	an H B C clerk.
Mrs. Woodrow	wife of the D.O.T. officer in charge at Port Harrison.
Freddie (Frederica)	her 15-year-old daughter, now married to Post Manager Ralph Knight, who was a new clerk on that voyage.
The Bishop	The late Rt. Rev. A. L. Fleming, Anglican Bishop of the Arctic.

IT was gloriously warm that afternoon and Dedie and I rolled up our jeans and dashed barefoot along the golden beach which fronted the post. We even went wading and let the wet sand ooze between our toes. This was the life! Finally we stretched out in the sun. Chatting of wedding plans we must have fallen asleep for we woke suddenly with the tide already at our toes and Dedie's shoes afloat. Hastily effecting a rescue we ran, under gathering clouds, shivering back to the post.

That same evening we sailed out of Eric's Cove and into the ice and snow of the strait again. On the morning of July 25th we arrived at Cape Dorset, Baffin Island. Here, we saw a Roman Catholic Mission as well as a Company post. Peering ashore we saw two animated figures tumble out of the mission dwelling. Their black robes fluttered in the wind. A moment later the mission standard was run to the top of the flagpole and the figures went tumbling in again.

Here we left Shorty Tinling who remained as apprentice clerk to the bachelor post manager. But, before the ship weighed anchor I had one of the most pleasant experiences of the entire voyage. Shorty left me a gift. During the trip he had often heard me lamenting the fact that I had brought with me almost every bit of wedding equipment —except the cake. And because of my thoughtless complaining and his own warm generosity he had taken the huge fruit cake which his mother had given him before he left home and handed it to Chief Steward Georges Fioratos to be iced and decorated for the occasion before the ship reached Port Harrison.

Much embarrassed, I protested loudly. A home-made fruit cake in a bachelor trading post would have been worth its weight in fox skins. But Shorty was cheerfully firm about the fact that a wedding present could not be refused. I stammered my thanks as he said goodbye. The cake became more than a cake. It was a symbol, the good fortune of which has never left us.

We slipped out of Cape Dorset at midnight in the golden haze which marks the blending of one arctic summer day into the next. Here there was no night—only sunset and sunrise, which mingled in crimson and mauve across the sky. . . .

Somehow we were no longer all strangers on a strange ship sailing treacherous arctic waters. The bond of shared emotions linked us all. Someday soon I too would be one of those solitary figures left behind to pull ashore in a little boat. . . . Perhaps the Arctic cast a spell upon those whose feet touched her shores to stay. I was soon to know. Only two more ports of call before Port Harrison.

The trading post at Wolstenholme, established in 1909, took its name from that given to the cape by Henry Hudson. This is the beach where the brides went wading one warm July afternoon.

Photographs by
Max Sauer.

Another passenger on board the "Nascopie" was the late Rt. Rev. A. L. Fleming, Anglican Bishop of the Arctic.

Landing supplies at Port Harrison. Here, too, the brides finally landed for their weddings.

On July 27th Southampton Island lay before us, chaste and flat. There were mountains on the northeastern side but the remainder of the area appeared to consist of shining limestone plains which were almost luminous in the morning sun. The island was discovered in 1613 by Sir Thomas Button, but was not settled until within the last quarter century.

The post with its scarlet roofs and doors was all aglitter for shiptime inspection. The beach was covered with wild flowers, and even the rocky ledges were festooned with nosegays. We did all the usual things at the dwelling house; the ritual of tea, little cakes and small talk. The grey bearded Father at the mission was also the perfect host as, blue eyes atwinkle, he rushed about, making us feel at home.

In Coral Harbour, about nine miles from the settlement, lay a National Defence air strip which had been established at great cost in 1942. The buildings were now occupied by a dozen or more employees of the Department of Transport's radio and meteorological division. Dedie and I gave the boys an unintentional surprise by wandering in unannounced. (The remainder of our group was some distance behind.) Knocking on the outer doors proved futile. The long low buildings seemed quite deserted. In a gaily adventurous mood we skipped down the empty corridors to suddenly confront an extremely astonished group of men lounging in a dormitory.

"Good God! Women!" shouted one.

But even he was too paralyzed to move. Not only were they unaware that a *Nascopie* party had come ashore, but the poor fellows had seen only one white woman in a year or more. And there we stood in the doorway gaping like a couple of goons. We never missed a thing, and the unfortunate boys knew it. Toes protruded from mismated socks. Shaves and haircuts were noticeable by their absence. From the walls and even the ceilings hundred of pin-up girls gave us round-eyed stares. Never have I seen so many reproductions of undraped female flesh all in one room.

Suddenly everything but the pin-ups came to life. Everyone began talking and gesturing at once. Some made futile attempts to hide embarrassing objects under the beds. Others merely muttered and dashed past us out of the room. After the confusion died down we found there was no one left but ourselves, the pin-ups, and a very handsome but unfortunate young man who had been seated farthest from the door. Chivalry had not deserted him, however, for he straightened an imaginary tie and offered to show us around.

Later we went back to the ship, but upon invitation returned in the evening with Mrs. Woodrow, her accordion and most of the other passengers all set for a party. Never had this lonely arctic island been so gay. The same boys, no longer dishevelled or confused, were immaculate (though slightly uncomfortable) in collars and ties. A large room had been cleared and a dusty piano rolled in. Even an old-time fiddler had been rounded up.

We waltzed, schottisched and swung our partners through the long dazzling hours of the northern night. Darkness never fell. The sun hid her face for a short time but the sky remained a dusty blue. Only a streak of scarlet divided it from the long white beaches which stretched beneath. When we could dance no more we sang. And when we could sing no more we were served breakfast—bacon and eggs at long oil-cloth covered tables.

The next evening the boys came out to the *Nascopie* to say goodbye before we sailed. Solemnly they presented each of us girls with a carton of chocolate bars, kissed us goodbye, and before we could gasp for breath were off again in their little boat.

In the morning we discoverd that in addition to a pair of brides aboard we now also had a bridegroom. "Slim" Harrington, one of the Southampton boys, was on his way to Arctic Bay. Slim was a good looking lad several years our junior. Dedie and I pounced on him with our questions.

"Where's the bride?"

"Don't really know," admitted the somewhat abashed bridegroom.

"But she must be somewhere!"

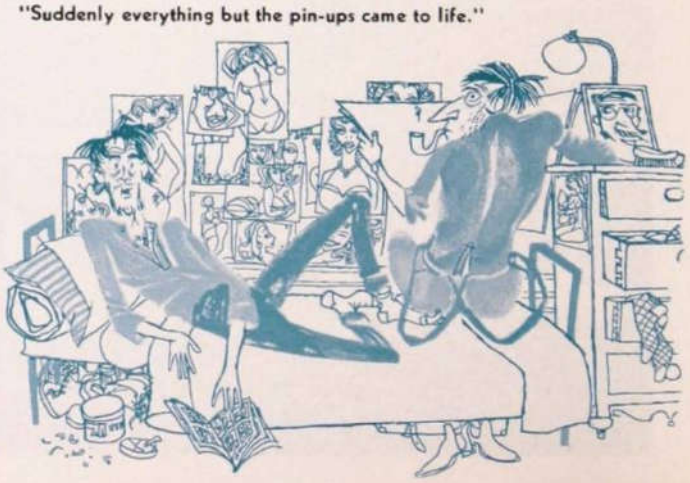
"Where is the wedding?"

"At Churchill, if she makes it. Sure do hope she gets there before the ship pulls out."

Surely this was an anxious bridegroom.

We finally learned that Slim's girl friend was supposed to be travelling by rail from Eastern Canada to the Hudson Bay seaport of Churchill, Manitoba, where the two would be married before both proceeded with the ship to his new posting on northern Baffin Island. But Southampton's infrequent mail service had somewhat confused the issue.

"Suddenly everything but the pin-ups came to life."



"What the bride wore hung limp and dripping from every hook, line, and steam pipe in the room."

By nightfall we had gained his confidence to the point where he showed us her picture. She was an adorable little girl who looked scarcely out of her teens.

"We'll be OK," said Slim, "only I sure hope she makes it."

As we neared the northern tip of the eastern coast of Hudson Bay the ice which we had battled at intervals throughout the entire voyage became very heavy. The pans moving up out of the Bay toward the Strait were more firmly packed. The ship's speed was cut to a minimum. We edged, twisted and sought our way around the ever-mounting barriers. The weather turned miserable with winds, sleet and snow. The decks were slippery with the ice, and we stayed in the warmth of our cabins.

Mrs. Woodrow serenely embroidered pussy willows on a tea cloth. Freddie ate chocolates. I forget what Dedie did. I was occupied with going quietly crazy at the delay. When I put my parka on and stuck my nose out of doors, the ship would be zigging. When I repeated the procedure she would be zagging. Finally, I gave up and decided to use my pent up energy in laundering some clothes. So I monopolized the ladies' bathroom (which was also the laundry) for an entire afternoon. At last I completed the job and the irate line-up outside the door finally got moving. But no one seemed to appreciate the preview of "what the bride wore" that hung limp and dripping from every hook, line and steam pipe in the room.

It was not until late evening of July 31st that we anchored off Cape Smith. Through the fog and rain the scattered buildings of the Company post could be seen huddled desolate at the base of the cliffs. A field of ice lay between ship and shore. The captain decided we could get no closer and the supplies must be unloaded from here if the barges could find a way through or around the ice.

Out of the fog appeared a little craft, and as it drew near we heard a feminine voice and laughter. A tall slim white woman, wearing scarlet slacks, stood precariously in the bow. We crowded to the gangplank. She was on deck in a flash, defying a world of ice and snow in the joyousness of shiptime. Her husband was close behind. It was the post manager and his wife—Bill and Babs Heslop—the entire white population of the island.

Later I met Babs below deck. She flitted about strewing a radiance and affection in her path.

"You are to be my new neighbour," she smiled. "It will be so nice to have a white woman at P.O.V."

She must have noted my confusion as she explained: "Wulf's post is less than a hundred miles south of here. It will be wonderful having you so near. We'll write letters."

I only hope I made a coherent reply. My mind was busy trying to grasp the meaning of her words. Where on earth was this place called Peeyovee? Was *that* where I was going? Could it be an Eskimo word? But, I decided if that was where Wulf was, then it was fine for me. . . .

After we left Cape Smith the going was really tough. The ship no longer searched for passage-ways around the ice. Instead she looked for crevices into which she might point her bow and ram her way ahead. We were now travelling against the ice and it milled and crashed around us with tremendous force. Although the noise was deafening, it was still a magnificent sight to stand in the bow and watch our good ship's relentless fight against the frozen sea. The cold was intense. How strange to think that this was the beginning of August. At home our friends were sweltering in heat, walking the burning pavements or frantically making ice cubes in their refrigerators. Ice cubes! And here we were in an entire sea of the biggest ones in the world!

For the *Nascopie*, it was normally only a twenty-four hour trip from Cape Smith to Port Harrison. Dedie and I made repeated trips down to the hold to check on our wedding things. All sorts of foolish worries appeared. I had eaten such hearty meals on the ship that perhaps my dress no longer fitted. Oh, why had I insisted on a size 12? Did Wulf have a wedding ring? I had not the slightest idea. If not, where would he get one? Probably some old Eskimo would have to carve it out of a walrus tusk. If so, would the marriage still be legal?

Dedie was smart. She had brought her own wedding ring. She even had Sam's wedding shirt—size 17. But she began worrying whether or not it would be big enough. After all, it was quite some time since she had last seen him. So we spent one morning going around asking all the men their shirt sizes.

We told the bridegroom our troubles. He wasn't concerned with shirts. All he wanted at his wedding was the bride.

"Sure hope she makes it," he said for the umpteenth time, and wandered off with his hands in his pockets.

Each Sunday during the voyage, church services were held in the dining saloon by the Bishop with Mrs. Woodrow at the organ. I never ceased to thrill at the words in "Special Prayers For Use At Sea." We listened to the quiet voice of the Bishop as the mountains of ice thundered at the portholes. The ship lurched and trembled as we sang.

Oh hear us when we cry to thee,
For those in peril on the sea.

Every time we struck a particularly large pan of ice someone's hymn book would slip from his fingers or one of us would lose his balance and make a wild lunge for a chair back. But there were always enough of us still erect to carry on the singing.

One evening Wulf's district manager, Mr. J. W. Anderson, came upon a group of us as we sat joking at the head of the stairs. He held a radiogram gravely in his hands.

"The bride we left at Pond Inlet last summer* has just given birth to a baby girl," he told me. "Both fine."

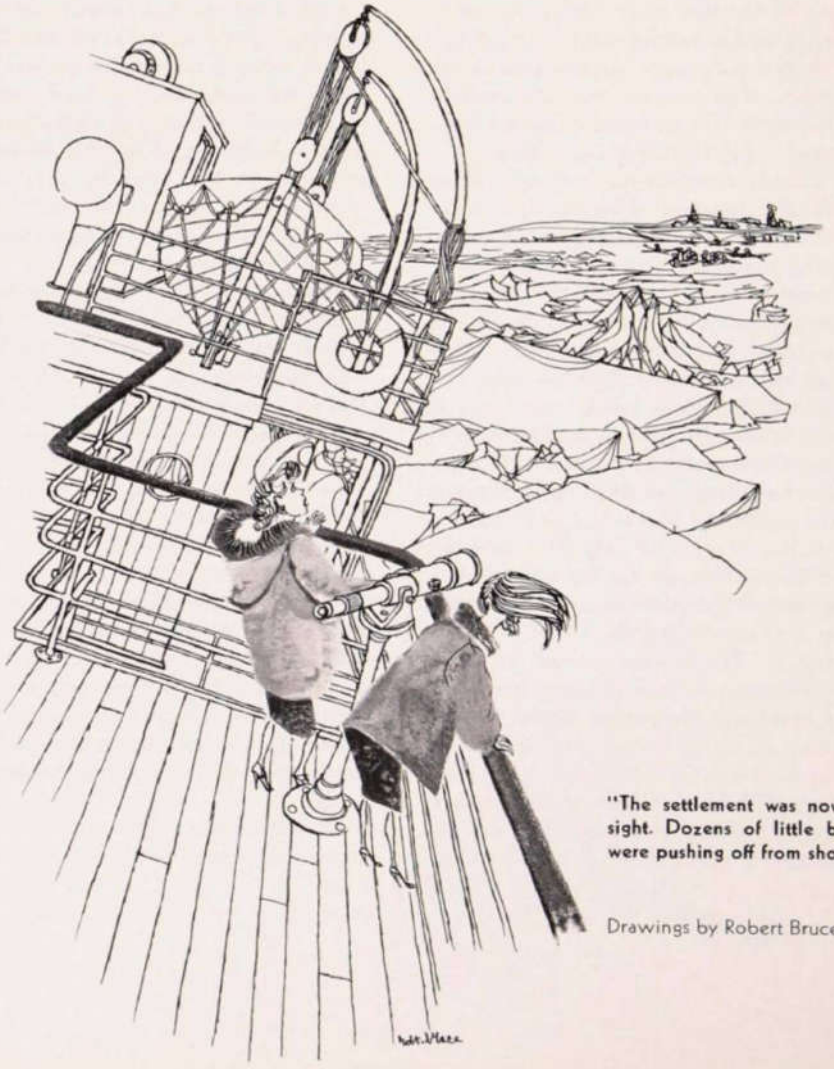
*Mrs. Bert Swaffield.

It was a joyful message but his seriousness perplexed me. I saw something which seemed like relief in his eyes as he looked at me a moment before walking on.

Only months later did I come even partially to understand. Here was a member of his large arctic family who had courageously chosen to bear her baby at one of the Company's most northerly posts—alone without doctor or hospital, with only her husband and perhaps the Eskimos to help. She had taken a chance and won. "Both fine." Truly it was happy news. But its advent had been awaited with concern and its arrival by solemn thankfulness.

Every night we fully expected to arrive in Port Harrison the following morning. Every night we carefully removed our old nail polish and replaced it with a new coating. We even inveigled Slim, the bridegroom, into shining our shoes. Every morning we would be up early in a flurry of excitement asking one of the mates:

"Where are we now? Are we there?"



"The settlement was now in sight. Dozens of little boats were pushing off from shore."

Drawings by Robert Bruce.

And he would inevitably reply that we were several miles behind where we had been the day before. We nagged the captain so deplorably that he threatened to throw us both overboard.

The ice became thicker than ever and the ship had to spend hours pounding indentations into the walls of her prison. Reports of ice conditions at Port Harrison were even more unfavourable. There was even talk of abandoning the *Nascopie's* visit to that point. The season was growing late and some thought we might cross the Bay direct to Churchill. When I heard this news I went wailing to Mr. Anderson. Highly distraught I blurted out:

"Oh whatever shall I do if we can't get in?"

"Why," he replied smilingly, "nothing at all. You will get off at Churchill, go home by rail and try again next year."

It was as simple as all that! What an appalling thought! I went down to the cabin, crawled into my bunk and pulled the covers over my head.

A week had passed since we left Cape Smith. Wulf and Sam frantically pacing the beach at Port Harrison despatched us nightly radiograms. We were now only a few miles outside the harbour but a billion tons of ice lay between us and shore. Most exasperating was the fact that we were never sure whether these messages actually came from the boys or whether fellow passengers had secured a blank radiogram pad and were making them up. A little yellow paper would come slipping under the cabin door and we would both pounce on it at once. If it were addressed to me I would moan.

"Wulf didn't send this."

And I would throw it out again. Minutes later I would be crawling around the corridor looking for it. Dedie got one from Sam.

"Come on in dear, don't be shy."

I never did discover which messages were authentic and which were not. After we arrived it did not seem to matter.

And arrive we finally did—on the eighth day out of Cape Smith. We felt the ship gain speed one morning. It actually sounded as if it were going somewhere. Sure enough, the ice was clearing. There was a patch of blue in the sky. It was enough for me. I made a forty-yard dash below to the ladies' bathroom where I was most unglamourously sick. Then I decided that as long as I was there I might as well do something practical. So I washed my hair.

"Oh, this is going to be good," boasted our friends in malicious anticipation of the big meeting at the gangplank. "We'll all have our cameras."

"Everyone is betting on whether Sam or Wulf will hit the deck first," confided Bill Woodrow, who was enjoying the situation greatly.

Thoughtfully, two loyal friends came to our rescue and offered us the privacy of their respective cabins. They suggested that as soon as the boys were about to come aboard we should quietly disappear. They promised to meet them and tell them where we were.

Closer and closer we drew to our destination. We were leaving the ice behind.

"There are the radio towers. We're almost home!" screamed Freddie.

The captain gave Dedie and me special permission to go up to the topmost deck where a large old fashioned telescope stood on a swivel stand. The settlement was now in sight. Dozens of little boats were pushing off from shore. We were so excited we could not get the telescope to focus. No sooner did one of us get it supposedly fixed on something than the other would be frantically pleading.

"Let me see. Oh, do let me see."

Half the time I think we were looking in the wrong direction. Maybe we were even looking in the wrong end.

With the naked eye we could see a large craft well ahead of the others.

Dedie had the telescope and she hung on tightly.

"White men on it. One has a fedora. Do Eskimos wear fedoras? It isn't Sam. Maybe it's Wulf. What does he look like?"

At that moment I had not the vaguest idea.

We both abandoned the telescope as the boat drew near. The crowd aboard it had spotted us and were waving.

We unfurled our hankies in answer, all the while screaming at each other.

"Do you see Sam?"

"No, do you see Wulf?"

"No, but he must be out there. Keep waving."

At the same time our fellow passengers were all on deck and shouting up at us.

"Come on down. Come on down."

Like startled field mice we did scurry down—but to the sanctuary of the cabins.

The heavy door swung shut behind me. From the portholes came the sound of voices and laughter. I paced the room in a most unbridelike aura of cold perspiration. Would he never come? Had our two true friends only been conspirators after all? The thirty-seven days of my bridal journey had been but fleeting moments compared to the centuries I seemed to wait in that cabin. Just as I decided I could bear it no longer, Wulf came flying in the door. My journey had ended. ◆

The author's two Indian guides load up at the start of a portage.

With an aluminium canoe and outboard motor, the author followed in the wake of the intrepid Jesuit who made the trip from Quebec to James Bay via the Saguenay in 1671.

Story and pictures
by Jock Francine

ON THE TRAIL OF ALBANEL

ANYONE who has knocked around the North a bit knows that—given enough time, enough food, a couple of wiry Indians to do the lion's share of the portaging, a light canoe and an incentive—you can travel a good long distance in the bush in a comparatively brief period of time. Add an outboard motor and you can put a hundred odd portages and a thousand miles of wilderness behind you in the space of forty days. I know, because that is what I did in retracing the route of the early French explorers to Hudson Bay in order to satisfy an ambition of long standing.

Some time ago, in a book on Tadoussac by W. H. Coverdale of the Canada Steamship Lines, I had read:

"On August 6th, 1671, Paul Denis, sieur de St. Simon, accompanied by Father Albanel, set out from Quebec to Tadoussac with one other Frenchman in order to travel overland to Hudson Bay. 'Hitherto,' reported Albanel, 'this journey has been deemed impossible for the French who had already thrice attempted it.' Yet these indomitable men, aided by three Indians from Tadoussac and later by some Mistassinis, somehow made their way to the Bay and back by August, 1672. They reckoned that they had portaged round two hundred waterfalls and had poled up four hundred rapids."

That sounded like a wonderful trip to make in this modern day and age, and I decided to try it. In view of my modern means of transportation and equipment, I can hardly consider myself "indomitable" for having accomplished, in much less time and partially alone, a journey which the early French voyageurs at first "deemed impossible." But my hat is off to the indomitable Father Albanel and his equally indomitable companions as I consider the conditions which existed two and a half centuries ago when they undertook to travel the nine hundred miles from Quebec to Rupert's House by canoe via the St. Lawrence-Saguenay-Mistassini-Rupert River route.

On a warm, sunny, June afternoon I thought of Albanel and his gruelling voyage as I drowsed in the stern of the *Wendigo*, a nineteen-foot, aluminium, square-stern canoe with a 7½ h.p. Evinrude churning at a merry clip down the St. Lawrence—the lush Ile d'Orléans and its grazing cattle to starboard, Ste. Anne de Beaupré and its impressive cathedral to port, Cap Tourmente looming majestically ahead. There are now a dozen French Canadian villages along the coast where I could have put in for fuel, for *les patates frites*, a glass of ale or a reasonably comfortable bed, had I been so disposed. Not so with Father Albanel and his companions; they were strictly on their own. In 1671 there was probably not a single settlement along the rugged hundred-and-fifty-mile coastline of the St. Lawrence between Quebec and Tadoussac other than the occasional summer encampment of Indians fishing for salmon at the mouths of the Rivière Gouffre and the Rivière Malbaie.

Six hours after leaving Wolfe's Cove at Quebec, to the accompaniment of the noonday whistles, I pitched my tent on the western shore of Ile aux Coudres opposite Baie St. Paul, beside the wooden cross marking the site where, on Jacques Cartier's second voyage, the first Mass on Canadian soil was said in the year 1535. I had come sixty miles in six hours. Father Albanel and his party would have had to strain mightily at their paddles to cover twenty during the same length of time—what with the wind and tide against them most of the way.

Sitting in the stern of an aluminium canoe, I was conscious of the cold breath of the North Atlantic which blankets the broad surface of the lower St. Lawrence. Marine life was very much in evidence; flocks of sea birds and waterfowl swept low over the *Wendigo*; an occasional salmon glistened momentarily in the sunlight, pursued perhaps by the white whales and harbour seals that range the towering coastline. The eighteen-foot tides occasionally made navigation difficult but the canoe rode lightly and there was little danger of striking any shoal which was not readily apparent by the colour or commotion of the water above it.

Some hundred and fifty miles below Quebec I entered Baie Ste. Catherine where Champlain met with the local Montagnais chiefs so long ago. A cairn marks the spot on the bluff and a number of black-robed priests were sitting in a nearby kiosk taking their ease beside the broad,

Mr. Francine, a member of the Explorers' Club who lives in Pennsylvania, was a fur trader in the Mistassini-Eastmain district some 17 years ago.

sparkling St. Lawrence. I tried to envision Champlain, bearded and resplendent in shining breastplate, addressing the sullen, dusky chiefs; but about that time my attention was drawn to the picturesque village of Tadoussac some two miles away. It was nestled on the side of a headland, across the bay, where the Saguenay river meets the St. Lawrence in a sea churned by currents and rip-tides.

Any intention I had to land at Tadoussac and visit the site of the first trading post in Canada was dissipated by the sight of swarms of summer vacationers strolling on the manicured lawns of the big resort hotel, and sunning themselves on the rocky beaches. The atmosphere I sought obviously did not lie in that direction, so I pointed the bow of the *Wendigo* up the Saguenay, into the setting sun. Perhaps alone in a canoe on this great river I could experience the emotions of the oldtime voyageurs as they headed into an unknown wilderness with only the vaguest notion of what lay ahead of them.

One obstacle that lay immediately ahead in those days was the Grand Décharge, where the Saguenay flowed out of Lake St. John, a fearsome maelstrom of foaming cataract and whirlpools. The French voyageurs had this to contend with, but fortunately I was spared the encounter due to the great dam at Ile Maligne which now controls the once-raging waters of the upper Saguenay.

Except for its industrialized upper reaches the Saguenay has changed little in physical appearance over the centuries. The seventy-mile-long gorge, two to three miles wide in places and many fathoms deep, is still as lonely and foreboding and as potentially dangerous for the canoeman as the adventurous Jesuit must have found it to be. And I venture to guess that the three Frenchmen and their three Indians from Tadoussac probably had as wild a ride in their big birchbark canoe as I, alone in my small aluminium one.

I almost came a cropper at the foot of Cape Eternity which rises sheer twelve hundred feet out of the water. Two combing green seas of icy water swept over the *Wendigo* in succession; a third would have rendered her completely unmanageable. I attribute my escape from disaster to being alone, able to counterbalance the lurchings of the wallowing craft without the unpredictable movements of another person to impair my timing—and to the kicker which, except for a chilling moment of watery spluttering, never faltered.

Although the lower Saguenay has remained essentially unchanged, an immense transformation has taken place along the river from Haha Bay to Lake St. John. Where in the 1670s there was nothing but trees and rock, there are now big pulp mills, hydro-electric dams, the bustling city of Chicoutimi, the mile-long aluminium plant at Arvida, freighters from many nations disgorging 20,000 tons of ore a day at Port Alfred, railroads, steamships, and super highways.

Except for the still-wooded north shore of Lake St. John, whose waters stretch to the horizon, the low-lying forest which once bordered the shores of the big lake has given way to fertile farm lands reminiscent of those in the Midwest. Generations of industrious French Canadian *habitants* have tilled the narrow, neatly fenced fields and cut back the woodlots that dot the flat countryside. But at St. Félicien, six miles up the Ashuapmuchuan River, is the gateway to the northern forests.

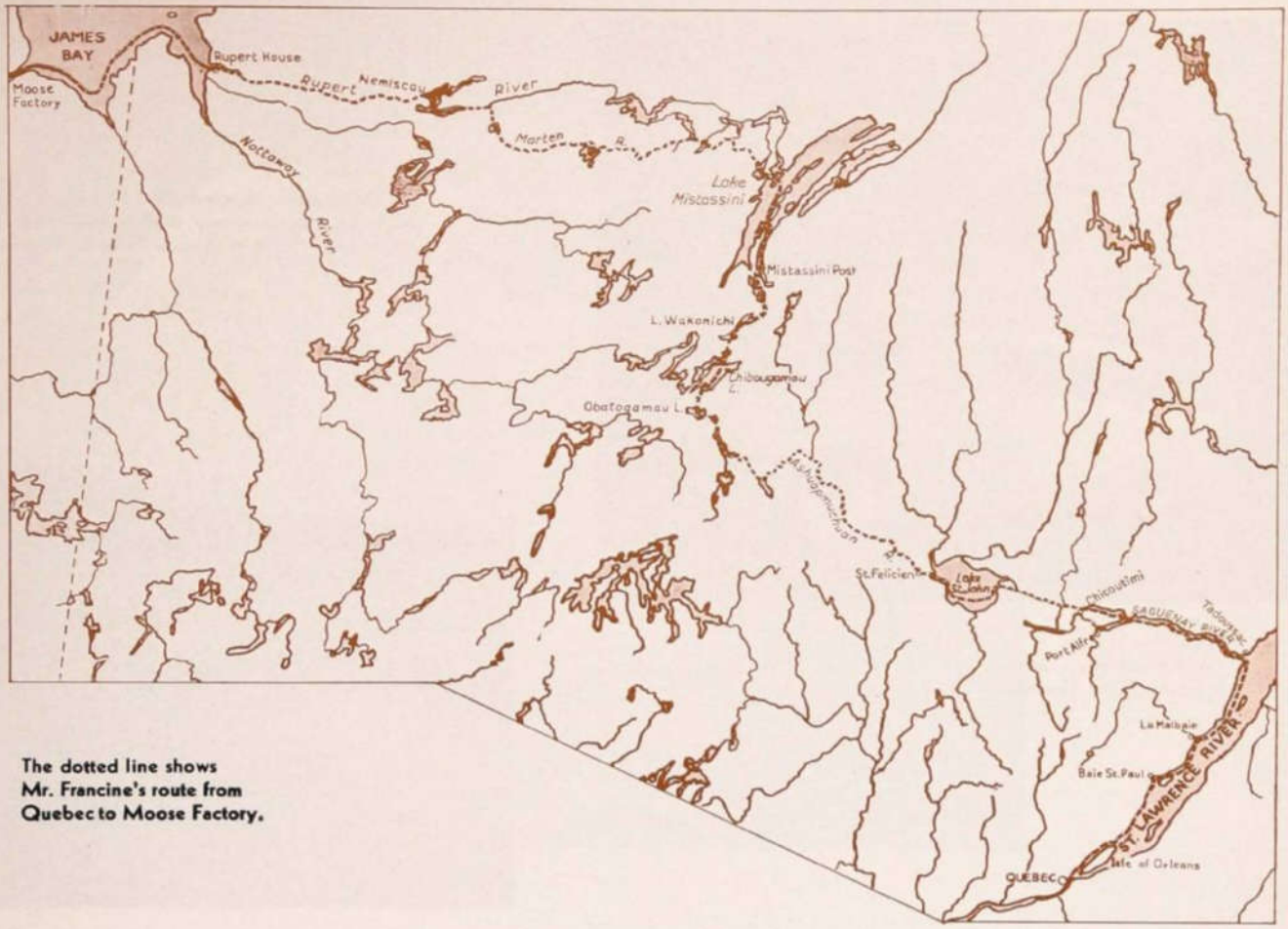
There I hired two Mistassini Cree Indians to guide me through two hundred miles of wilderness to Mistassini post, north of the height-of-land. They claimed they knew the route all the way to James Bay, but I was to discover later that it had been thirty-five years since one of them had been down the Rupert river to the Bay with his parents as a five-year-old boy; the other had never seen the Rupert. For the time being it didn't matter; our immediate objective was Mistassini and they had been over this route many times.

We started up the Ashuapmuchuan, travelling in comparative silence due to the language barrier, through low, marshy land covered with second growth which rose almost imperceptibly as we approached the height-of-land that stretches across the Province of Quebec and Labrador for thousands of tortuous miles. A few inches on one side or the other decides whether a drop of rain ends up in the St. Lawrence and the North Atlantic or in Hudson Bay and the Arctic Sea.

We experienced all the familiar assortment of sounds, sights and sensations that go to make up the atmosphere of the bush: the rhythmic swish of the waves on a lake shore, the rush of wind in the ears, the freight-train rumble and tremble of rapids, the hot, dry, choking aromatic smell of brittle moss on a midday portage, the trickling sweat, the pungent aroma of fly dope, the excruciating bite of a moose fly, the soft blue blanket of dusk and the wail of a loon on a lonely lake in the night; those and thousands more.

Eventually we came to a sluggish stream winding through moose bogs where it was often necessary to get out and tug the canoe across the mud. There were many moose tracks but no sign of the animals themselves. Late in the afternoon the stream became a marsh and we made a short portage for a half-mile, over a small hill, to where it ended beside an alder-choked stream flowing north. We had crossed the height-of-land.

From now on we would be travelling downhill to Lake Mistassini, although at times it was hard to convince my-



The dotted line shows Mr. Francine's route from Quebec to Moose Factory.

self of the fact as it seemed to me that we went up more hills than we came down. We camped that night on the portage to the Obatogamau River, beside a small bubbling stream.

I was impressed with the unspoiled beauty of Lake Obatogamau, the first large lake we came to after crossing the height-of-land. Twenty-one miles of our route threaded some of the seven hundred and fifty islands which dot the surface. I could see why Indians unfamiliar with the terrain have been lost for days in this island labyrinth.

We portaged through a forest consisting largely of black spruce, tamarack, balsam fir, jack-pine, cedar, aspen and small white birch. The wet moss underfoot was like walking on saturated sponges, very easy on the feet but very tiring; it steamed in the early morning sun and the rising heat caused the sweat to drench our shirts and wash away the carefully applied fly dope. Little itchy rivulets of sweat trickled across the scalp, from under the neck-crunching tump lines.

Lake Chibougamau, the next large lake to the north of Obatogamau, is also a lovely, impressively big, sprawling body of water, eighteen miles long by six wide, with many islands studding its surface like miniature fortresses. The land rises gradually from its southern end towards the north where several wooded hills tower above the surrounding forest. Actually these hills rise no more than three to five hundred feet and are only big by comparison, with such colourful names as the Sorcerer and the Juggler. As we hummed up Lake Chibougamau at nine m.p.h., gulls, terns, loons and ducks flew across the surface of the lake which was the colour of lead flecked with silver under a hazy, late afternoon sky. Large black ravens uttered strange unearthly cries, and late that night we heard the agonized cries of loons—not their laughter nor their melancholy half-moan, half-wail, but their wild high-pitched scream that sends shivers chasing up and down one's spine.

These cries, moans and wails were in keeping with the reputation of Juggler's mountain which rose not far distant from our tent. Its fortress-like summit was once supposed by the native Indians to be the dwelling place of the Matchimanitou. They believed that a certain spring at the foot of the mountain throbbed in accordance with the

The author and his
19-foot aluminium canoe
in Lower Town, Quebec.

With motor shipped, the "Wendigo" is paddled through a marshy, shallow creek near the height of land north of Lake St. John.

placid or turbulent disposition of the great master of the mountain. As late as the turn of the century the half-breeds of Lake St. John were superstitious about this spring and would rather go thirsty than drink its waters.

Near the beginning of the first portage after leaving Lake Chibougamau, just before the trail starts a stiff climb up to the dividing ridge (alt. 1330 ft.) between the Rupert River and Nottaway River watersheds, one of my Indians pointed out the remarkable geyser-like spring to me. It is about seven feet deep, crystal-clear, and six or seven feet across, with the finest white sand on the bottom which bubbles and flows outwards like boiling porridge. I waited to see if the Mistassini would drink, but he didn't. I did . . . but nothing happened!

Lake Wakonichi was the next big lake, and after that, Lake Mistassini, stretching away for a hundred miles!

By mid-morning, Mistassini Post with its summer population of six hundred Crees could be seen on a low treeless point, acres of white canvas gleaming in the sun. We had come two hundred and twenty miles from St. Félicien. The three of us were very excited, the Indians because they would be reunited briefly with their families, and I because there would be white men and women with whom I could converse without having to resort to the use of gestures and isolated Cree words. It had been seventeen years since I had passed this way on my return from wintering with the Crees near the headwaters of the Eastmain River; I particularly looked forward to talking over old times with Wilf Jefferys, the H B C post manager. And there were bound to be present some of the Indian hunters with whom I had shared that winter of cold and hunger.

When we arrived at the post we found that a mass wedding had just taken place which had united eight couples for better or for worse. Evidently the grooms were of the latter opinion. At the last moment one of them ran off into the bush. He was finally persuaded to return and the ceremony proceeded as scheduled. A prospector who was present said to me later, "Too bad you missed it. Quite a dance afterwards—Indians, traders, government surveyors, nurses and teachers, bush pilots and prospectors —everybody except the grooms who were outside in the dark consoling each other."

The two Mistassini Crees lift the canoe over a small chute on the Marten River.

Even without a mass wedding Mistassini Post is a colourful spot in the eyes of all but those who live there. The first post to have been built in 1674 by the French, three years after Father Albanel first saw the huge lake with its 2,000-mile shoreline. Over a century passed before the North West Company opened a post there in 1803, to be followed by the H B C in 1812. The North West Company has long since gone out of existence and the competition it once afforded the H B C at Mistassini has been supplied in recent years by free trader Emmet McLeod and his Mistassinny Trading Company, on far more amicable terms.

Except for the teeming post on its southern bay and the occasional Indian in a motor-driven canvas canoe, Father Albanel would detect little change were he to visit Lake Mistassini today. It is the same as it was centuries ago—always vast, sometimes lonely and often treacherous. The big lake, one hundred miles in length and from ten to sixteen miles in width, can be extremely dangerous in any kind of a blow, and the Indians, en route to the post in the spring with their furs, are sometimes wind-bound for days near the large boulder of Huronian granite at its northern end whence the lake gets its name: *mista* (big) *assini* (rock). Father Albanel's party of French and Indians must have heaved a sigh of relief, as I did, when they finally gained the protection of the islands far up the western shore where the mighty Rupert River starts its three-hundred-mile plunge westward to James Bay.

The low, rolling, forested country through which they travelled is essentially the same today as it was in 1671, and in 1899, when Henry O'Sullivan, Inspector of Surveys, wrote his report to the Honourable Adelard Turgeon, the Quebec Minister of Colonization and Mines:

"One would naturally think that in a country like this where choice food for the moose and caribou is found in abundance, mossy barrens and rocky escarpments covered with lichens, etc. etc. and with scarcely a soul to every hundred square miles to disturb them, those animals should be found in herds, and still I did not see a single one, nor hardly any traces of their existence."

Like O'Sullivan, we saw no traces of big game but beaver lodges by the score and ducks by the hundred, pike as long as a man's leg, brook trout and walleyes (doré) whose size would make the uninitiated fisherman babble

incoherently, and from Mistassini itself I took a 41½ pound lake trout! In view of the abundance of waterfowl and fish in the lakes and rivers it is difficult to imagine this country as a land of famine, and yet A. P. Low, the famous Canadian geologist-surveyor at the turn of the century wrote:

"The greatest number of deaths from starvation occur about the Rupert and East Main rivers, in the country midway between Nichicun, Mistassini and Rupert House, where the distance is too great from any of these posts to obtain assistance during the winter."

Although these conditions existed many years ago, they do not necessarily exist today, thanks to the advent of the bush plane. Nevertheless, having once read such a report, the thought is there, in the mind of one entering this far-flung wilderness for the first time. Every time we missed the route and were obliged to backtrack and search for dim, little-used portages, I was thankful for the fishing rods and 12 gauge shotgun that reposed in the *Wendigo*.

The waters of the upper Rupert swirl swiftly past park-like stands of stunted conifers and moss-covered ledges. At times the river widens to lake-like proportions only to be drawn between confining banks of Precambrian granite-gneiss—tons of water thundering down to James Bay. For the canoeman it is a heartbreak route, but fortunately a hundred-mile detour exists around the heavy rapids and chutes of the upper Rupert, via a tributary called the Wabistan (Marten) River.

One lake in particular on the Wabistan stands out in my memory as among the loveliest I have seen in northern Quebec. With its steep headlands, sandy beaches and deep bays, Lake Camousitchouane (Jacob's Lake) surpasses even Wakonichi and Mistassini in wilderness grandeur and beauty. I remember it well because it gave us a rough time. Big swells, curling and breaking, lunged at the *Wendigo* for two hours while the Indians clung to the gunwales and my arm ached from swinging the bow with the outboard to counteract each wave that threatened to sweep over the sides of the heavily laden canoe. There was no question in my mind that the *Wendigo* lacked the freeboard to make the journey along the coast of James Bay from Rupert's House to Moosonee, Ontario, and the railhead. In the days to follow I often wondered how I

Rupert's House, where the voyageurs came out on the seacoast after their 900-mile trip.

would solve the problem when the time came. But for the present, the high rate of gasoline consumption, due to the strong wind that blew almost continuously out of the west, was my chief concern.

We ran short of gasoline fifty miles from Nemiscau Post and were obliged to buck the wind with our paddles. Even with three of us it was back-breaking work, paddling a half ton against the wind, on a river too wide to have a perceptible current.

Father Albanel is credited with having discovered Lake Nemiscau and it was there, a hundred miles from James Bay, that the French built a fort in 1695. The early French fur traders, the North West Company, the H B C and Revillon Frères Trading Company all operated trading posts at Nemiscau at one time or another. Today, only the H B C post remains, managed by a hospitable twenty-year-old Scot named John Campbell, two years out from Morayshire, Scotland, with a burr that would have done justice to Sir Harry Lauder himself.

At Nemiscau I experienced northern hospitality as I had imagined it was dispensed at the more remote posts in times past when H B C men welcomed a visitor as one of their own—even if at times he happened to be a North West man.

It was hard to leave the good-fellowship at Nemiscau but my goal beckoned from a mere hundred miles down river—Rupert's House, the ancient trading post established as Charles Fort for the English in 1668 by the French trader Médard Chouart des Groseilliers, partner and brother-in-law of the famed and controversial Pierre Esprit Radisson. As I said goodbye to my new friends at Nemiscau—Post Manager John Campbell from Scotland, Clerk Eric Gamble from Ireland, and the Department of Indian Affairs' genial schoolmaster and divinity student, Ted Allen of Vancouver—I wondered how my two Indians would react to the sight of the salt waters of James Bay stretching across the horizon. Had I known I would not have been so chipper those last few days as we swept down the Rupert to the sea. McLeod, at Mistassini Post, had warned me: "These Indians from the interior have never seen water that big. You may have trouble persuading them to cross the Bay to Moosonee. Besides, your canoe is too small for the Bay."

Below Nemiscau the timber increased in size, some of the spruce over two feet thick at the butt. We passed open groves of big aspens that had more of a prairie quality about them than the stamp of the northern bush. There are sturgeon in the lower Rupert and on several occasions we came upon the temporarily deserted fishing camps of coastal Indians—frameworks of saplings lashed with thongs in the elliptical shape of Algonkin wickiups and some in the conic shape of the Cree wigwams. Once we passed the grave of a child close by a portage, marked with a small cross and covered with red tea berries.

Finally, eighteen fly-infested portages and a hundred or so miles below Nemiscau we came around a boulder-strewn bend in the big river and saw Rupert's House on a bluff, the post whose colourful and militant history dates back two years before the founding of the Hudson's Bay Company under Prince Rupert, its first Governor, in 1670.

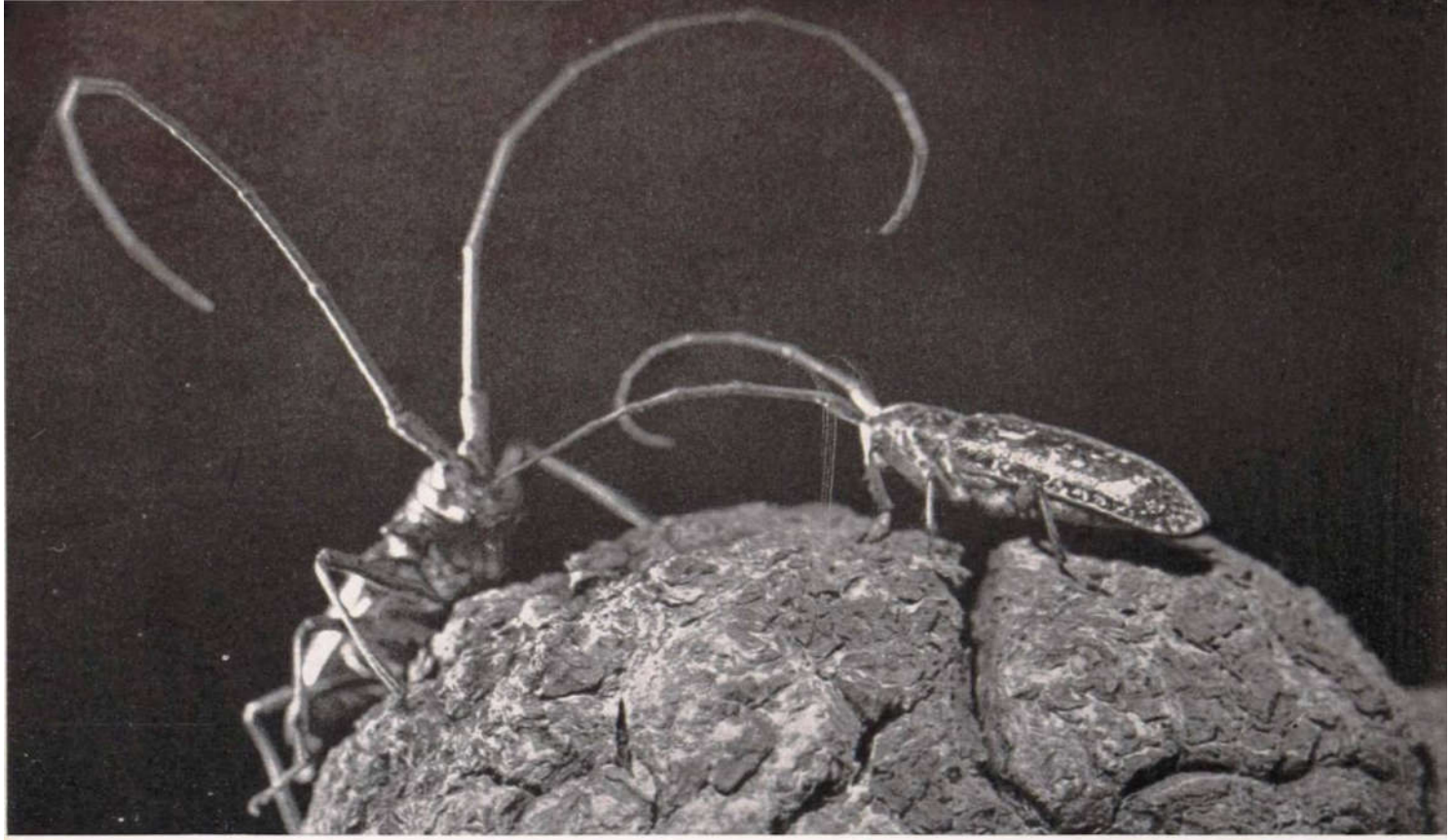
It was a tremendous moment for me! I had followed in its entirety the nine-hundred-mile trail from Quebec to Hudson Bay blazed by Father Albanel and his companions long centuries ago. I could only marvel when I realized that, once they left Tadoussac, over seven hundred miles away, no thriving industrial Kingdom of the Saguenay existed, no boom towns on Lake St. John and up at Chibougamau, no trading posts where they could replenish their supplies—just Rupert's House at the end of their rainbow. It was truly a remarkable feat!

Post Manager Currie McArthur solved my transportation problem to Moosonee. A twenty-three-foot Rupert's Special canoe, a product of the H B C canoe factory at Rupert's House, was ready for delivery to Moose Factory, some hundred miles to the west, along the bleak coastline of James Bay, and twelve miles up the Moose river in Ontario, opposite the rail terminal at Moosonee. He suggested that I leave the *Wendigo* to be sent out later by supply ship and, using my own outboard, deliver the Rupert's Special to Moosonee, a suggestion I was delighted to accept.

But, despite the Rupert's Special's huge bulk and apparent seaworthiness, the two Mistassinis refused to make the voyage unless I hired two Rupert Crees to accompany us, men who knew the route and where to find fresh water along the marshy coast. In a moment of exasperation, through the chief of the Ruperts who was acting as interpreter, I announced that I did not need four Indians to take me to Moosonee. So once again I was on my own.

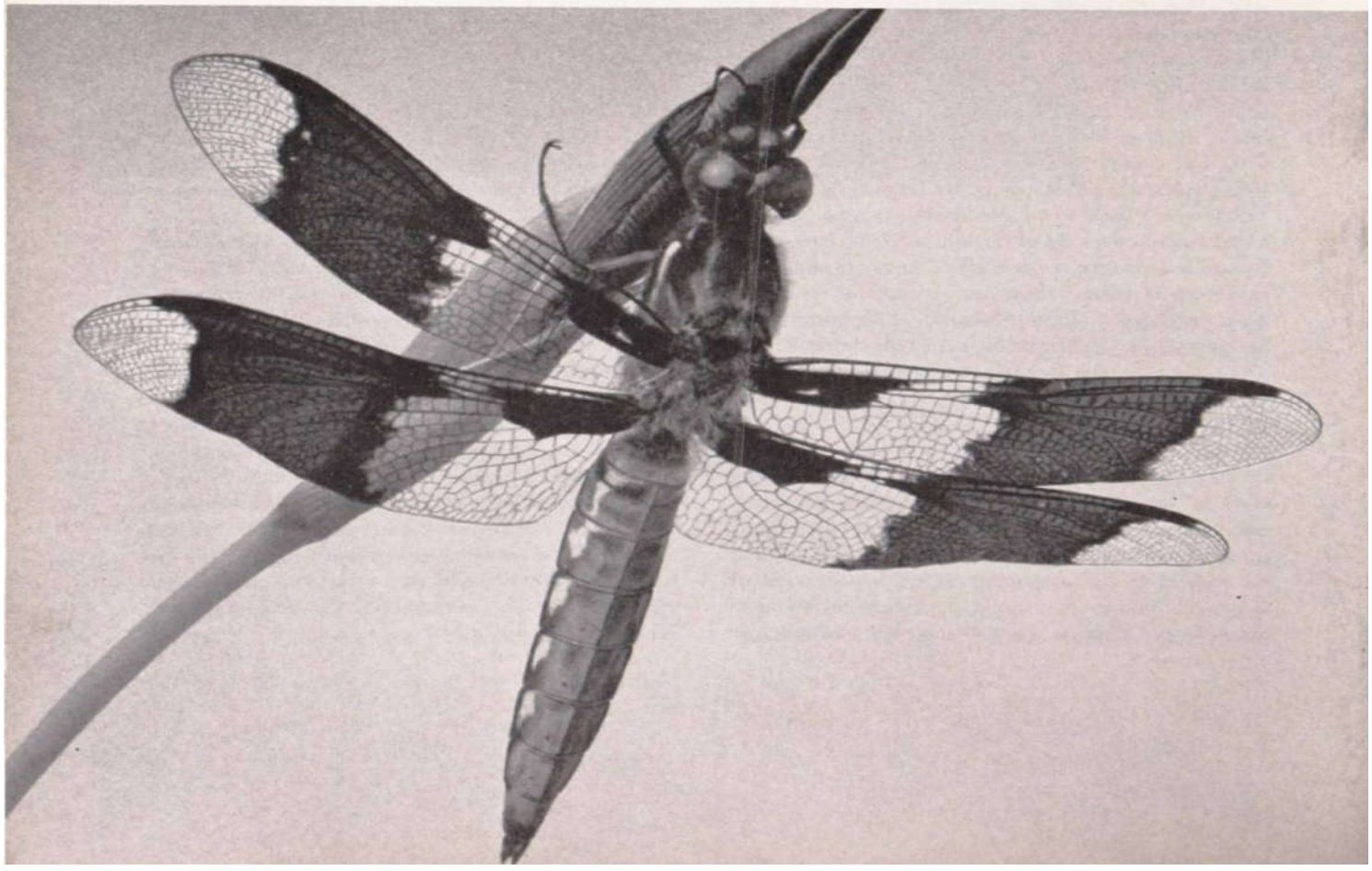
Three days later, after a voyage that alternated between a pleasure cruise and a nightmare, I arrived at Moosonee and the railroad. The Rupert's Special was in fine fettle after its shakedown cruise but I was slightly the worse for my encounters with storms which seemed intent on destroying any stranger foolhardy enough to venture alone on the Bay.

My ten-gallon drum of fresh water and one five-gallon drum of gasoline had burst during a storm on the first day. But all the harrowing moments were forgotten in the satisfaction of having realised a dream and accomplished what the early French voyageurs once considered the "impossible journey." ✦



Two different species of long-horned beetles meet on a large gall. Their larvae bore into trees and sometimes are so numerous as to destroy them.

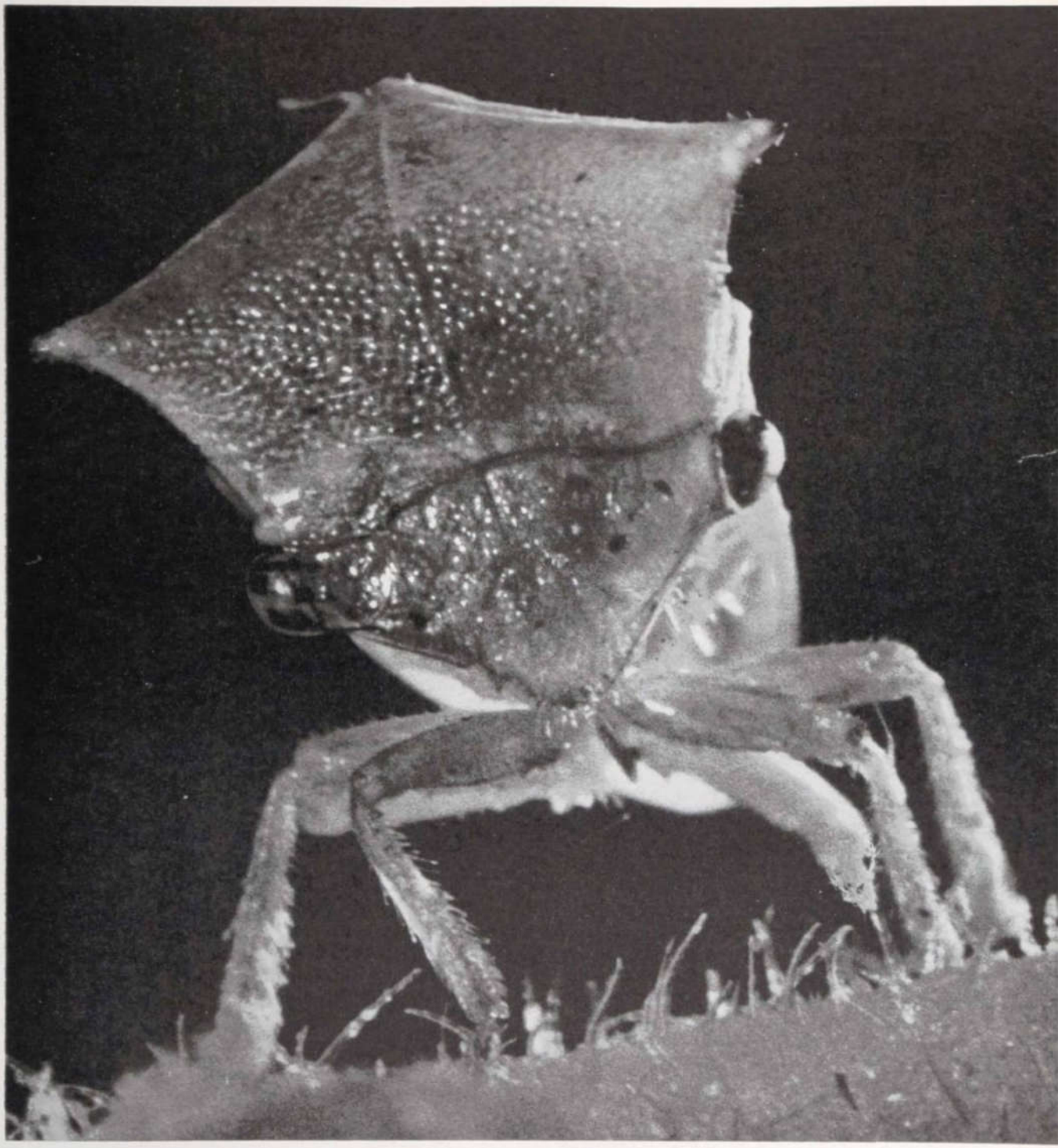
The familiar dragonfly is a predatory insect "hawk", eating a great many mosquitoes, gnats, and other pests. It can fly as fast as 60 m.p.h.



Mr. Green is supervisor of the photography-microscopy section of the Pulp & Paper Research Institute of Canada, in Montreal.

SMALL WORLD

by Harold V. Green

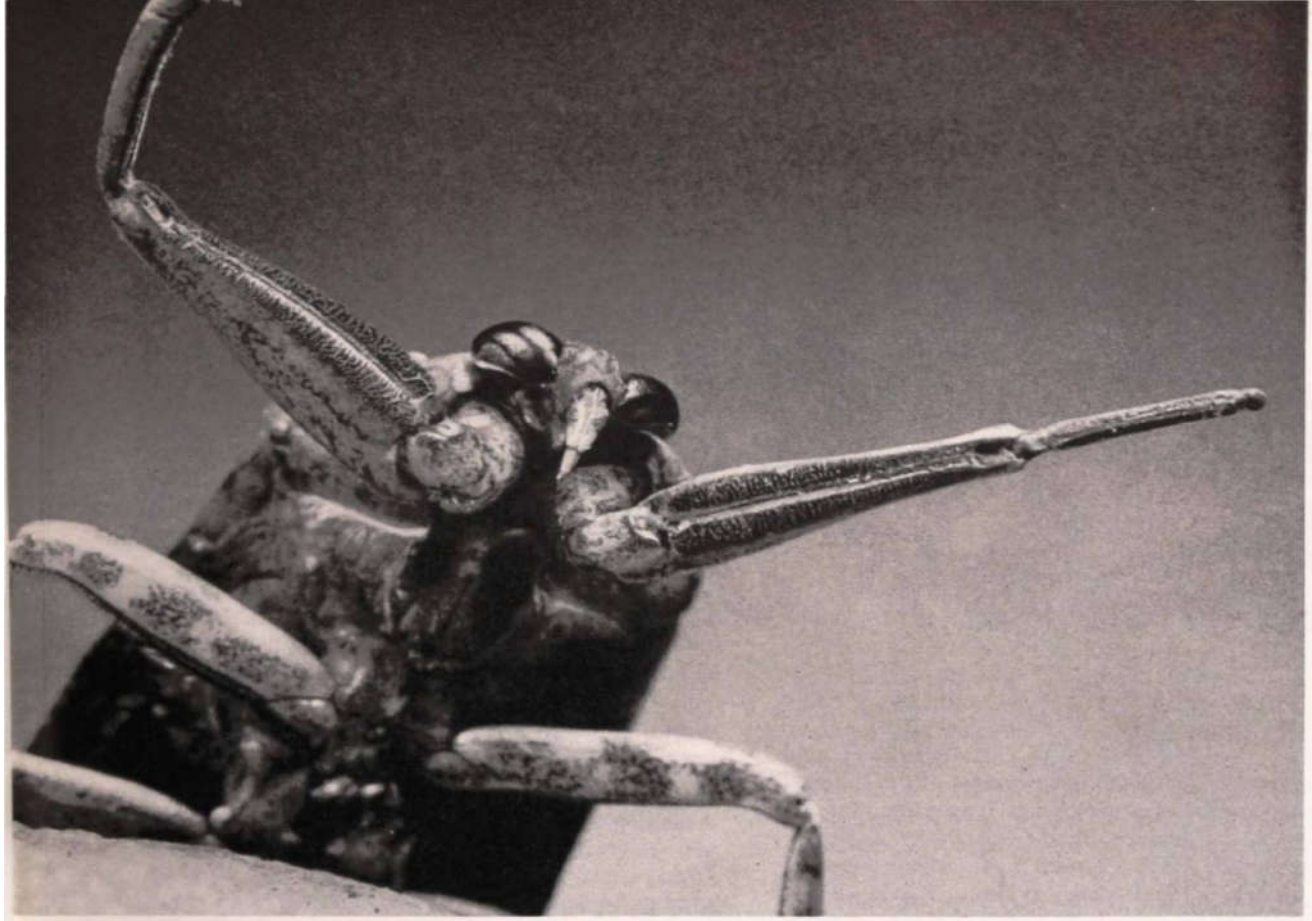


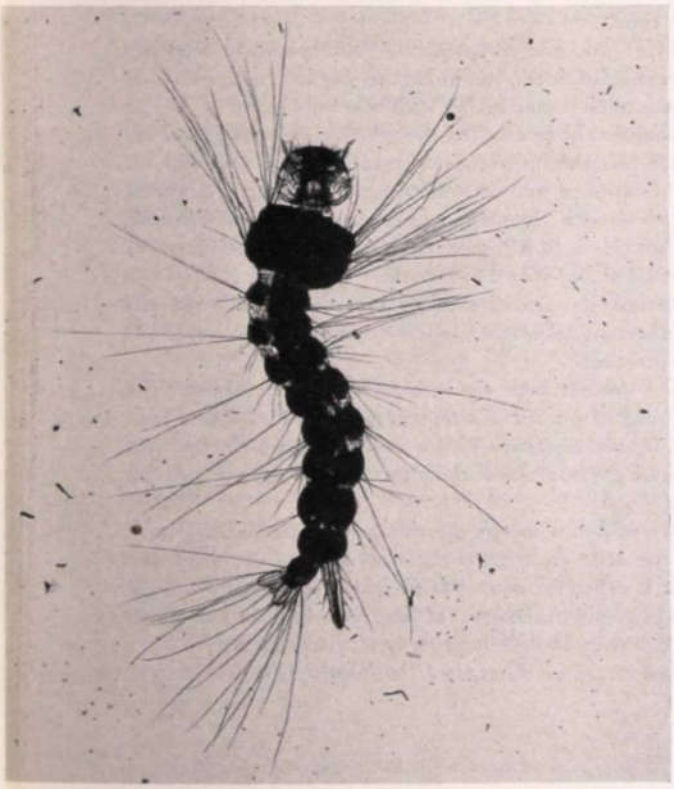
A buffalo treehopper about ¼" high, on a man's arm. Females lay their eggs in tiny punctures they make in the bark of twigs.

SMALL WORLD

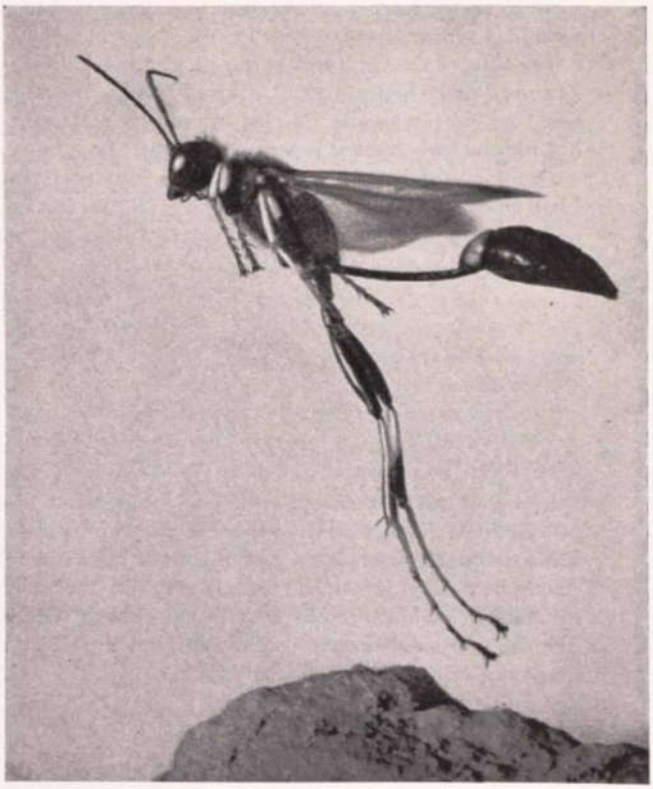
The giant water bug, over 2" long, can kill frogs, fish and newts, and its bite is quite painful to humans.

Two tiny froghopper nymphs work to produce a bubble nest to hide themselves while feeding. These froth masses, commonly called "frog-spit", are often seen on grasses and other plants.





Larva of the pitcher-plant mosquito, floating in pitcher-plant fluid, surrounded by bits of dust and plant debris, and particles of insects.



A common mud-dauber wasp jumping into the air. Their mud nests are often found attached to the beams of sheds or garages.

Laurel is Hardy

Dr. "Scotty" MacNeish, archaeologist of the National Museum, who found the ancient culture material in the Yukon that he described in the last *Beaver*, has made another find at Amisk (Beaver) Lake in Saskatchewan. With the help of Harry Moody of Denare Beach, who led him to the spot, he unearthed nearly ten thousand pieces of broken pottery. According to the Saskatchewan Government this is the most northerly point in America that such woodland-type pottery has been found.

The older of the two types he dug up was that known as "Laurel," dated between 500 B.C. and 500 A.D. The other was Cree pottery similar to that appearing in late prehistoric and early historic times in Manitoba.

Dr. MacNeish is now back in the Yukon, busy about the Firth River site. But when he gets back to Ottawa this fall he will get to work on analysing the Beaver Lake pottery and see what he can learn from it.

Toxophilite

In one of our eastern cities there is a restaurant dispensing fine food and drink to those of discerning palate. The atmosphere is pleasant, and the decor outstanding, chiefly because of the Indian murals that ring the walls. And there is a tale about these murals that will bear telling. The first part is definitely factual: we were there at the time. The last is conceivably apocryphal.

When the owner decided on an Indian motif, he called on a well-known Canadian anthropologist for advice. And the advice was to the effect that the Plains Indian type of decoration with its geometrical forms, bright colours, and picturesque objects such as teepees and trailing headdresses, would appeal to more guests than the art of any other Canadian culture. The result, executed by a well-known artist, was very attractive, and the anthropologist told the owner so when he visited the restaurant for the first time.

"Ah," said the restaurateur, "but have you seen my *piece de resistance*?" And he led the way to a finely executed mosaic of an Indian archer with bow full-drawn.

Confidently he awaited the glowing approbation of his friend. But the anthropologist regarded the archer without enthusiasm—if not with distaste. For instead of grasping the arrow with thumb and forefinger as an Indian should, the warrior held it between the middle and forefinger, as men of the Old World used to do.

At last the scientist coldly remarked: "He's got the Mediterranean release," and without another word, left the premises.

The restaurateur was crushed, and bewildered. The meaning of his friend's remark was utterly beyond him. But in conversation with his bartender about it the next day, we are told, one of them was struck with a fascinating idea.

It is said that shortly thereafter a new cocktail appeared on the *carte des vins* of the restaurant. Customers who tried it called for more; for the colour of Aegean sunlight was in it, and the bouquet of Mavrodaphne; and its effects were as swift and exhilarating as an arrow's flight.

And its name? What else? "Mediterranean Release."

NORTHERN BOOKS

WHOOP-UP COUNTRY, The Canadian American West 1865-1885, by Paul S. Sharp. University of Minnesota Press, Minneapolis, Thomas Allen Ltd., Toronto, 1955. 347 pages. $5.50 in Canada.

Reviewed by Douglas Leechman

THE scope of this book is considerably wider than the title would suggest. In fact, it is the sub-title that really tells us what it is about, the Canadian American West of some seventy-five years ago, the generation in which the North-West Mounted Police were organized—the generation of Custer and Sitting Bull. The principal feature of the Whoop-Up Country was the Whoop-Up Trail that ran from Fort Benton in Montana to Fort Whoop-Up in Alberta (and on to Fort Macleod), the successor of the Old North Trail which, from time immemorial, had paralleled the Rocky Mountains on their eastern slope.

The Fort Benton of 1865 would appear to have been not unlike the Whitehorse of today, on the fringe of the settled areas, a centre of transportation, the head of navigation, the point at which waterways and roadways met, a focus of selling and shipping. It was not till the building of the great transcontinental railways turned the tide of traffic from east to west, rather than from south to north, that its importance diminished, to be revived only temporarily when the cattle industry caused a new boom in the Whoop-Up Country.

Montana, the southern part of the area, is treated in greater detail than the north, and Fort Benton fills many more pages than does Fort Whoop-Up; but this is to be expected, for source material is more accessible in Montana, especially in the excellent library of the State Historical Society in Helena, and also more abundant.

The author is associate professor of history at the University of Wisconsin and his choice of records to be consulted and his copious footnotes make it clear that he knows who may be relied upon as an authority and who may not. At times one feels that certain sections were included to achieve completeness and from a sense of duty rather than because they interested the author. Fortunately the book is not without humour and the style is lively and readable. The least happy feature is the map, so small as to be almost useless.

Dr. Leechman is director of Western Canadiana for the Glenbow Foundation at Calgary.

THE FUR HUNTERS OF THE FAR WEST, by Alexander Ross. Edited with an introduction and notes by Kenneth A. Spaulding. The University of Oklahoma Press, Norman; Burns & MacEachern, Toronto, 1956. 304 pages. $6.50.

Reviewed by Lancaster Pollard

THIS book may best, perhaps, be reviewed by considering the text and its editing, the introduction, and the volume as an example of book making. Its value to historians needs only to be mentioned: since originally published in 1855 it has been a principal source for all writing on the fur trade in the Pacific Northwest during the North West Company and the Hudson's Bay Company activity there. Consequently, an edition transcribed from Ross's manuscript would be very welcome, indeed.

This volume is welcome, but not for the reasons claimed.

The new edition does not, as the dust cover claims, differ "in many important respects from the version published in 1855." A comparison of many parallel passages in the two editions discovers in the new one a fair number of clauses and a few passages not in the old one, and numerous word and punctuation changes. None seems significant. In the first edition Ross, apparently, determined what he wanted to say and how he wished to say it. The editor of this text has often indulged the same freedom. He has not, he admits, "reinserted" passages previously omitted and has ended the printed edition at the middle of manuscript chapter thirteen. All that can be said on this point is that the 1956 version varies somewhat from the 1855 one, of which it is essentially a reprint.

Professor Spaulding's introduction contains surprises and disappointments. In it he hypothecates an antithesis: a "British tradition" and "the new social concepts beginning to emanate from the small nation east of the Mississippi." Somehow he finds the struggle is not among fur traders for profits, but between "causes"; and writes that by 1825 the "British cause [was] on the verge of defeat." That news would have been puzzling at the time and still will be to many. When he does discuss the actual business of the trade he is inaccurate in petty details—as in calling Sir George "General" Simpson—and confused in major details, as in his descriptions of the methods and practices of the trading companies and the trappers. It may be just as well that he says little on the subject.

Mr. Pollard, for several years superintendent of the Oregon Historical Society, has written much on the history of the North Pacific states.

As an example of book making the volume is outstanding. The typography and press work are pleasing and clean; the inserted illustrations are reproductions (in black and white, and one glaringly mis-labelled) of twenty paintings and drawings by Warre, Miller and one or two others, and all do their duty well.

Despite the sometimes befuddled introduction and the inconsequential changes in the text, this is a book historians will be happy was published because they can now afford a most useful book; and it is one that readers of adventure and travel will delight in, for Ross was a colourful and lively writer about events as humanly interesting as they were historically important.

THE MYSTERIOUS NORTH, by Pierre Berton. McClelland & Stewart, Toronto, 1956. 345 pages. $5.00.

Reviewed by Graham Rowley

THE managing editor of *Maclean's Magazine* here describes the journeys he has made in the North. He has travelled widely in the Mackenzie District and the Yukon Territory, and has visited the Nahanni Valley, Baffin Island and Knob Lake. Most of his journeys have been by air but he has gathered a great deal of information, and his book is rich in descriptions and stories about the places and people he saw. As he has wisely restricted his account to the places he has visited, his book does not cover all the North. It is mainly about the sub-arctic south of the tree line; less than a fifth deals with the Arctic.

Mr. Berton was born in Whitehorse and brought up in Dawson. It is not surprising that his accounts of the Yukon are the most satisfying part of this book. Here he has the understanding of a native; elsewhere he writes as a journalist, as a very perceptive outsider looking into the North.

The whole book is well worth reading. Mr. Berton makes the North interesting and often fascinating. He tries hard, sometimes too hard, to make it mysterious as well, but in this he does not succeed. The fact is that the North is not particularly mysterious.

Those who know it well will be able to detect a number of errors and may be disappointed in some parts of the book. It is not, however, intended for the experts but rather for that growing number of people who are becoming interested in the North and want to learn something about it. For them it is an admirable introduction.

Mr. Rowley is co-ordinator of the advisory committee on northern development in the Department of Northern Affairs, Ottawa.

PAGEANT OF B.C., by B. A. McKelvie. Illustrated by Frank Newfeld. Thomas Nelson and Sons, Toronto. 263 pages. $4.00.

Reviewed by Walter N. Sage

BRUCE Alistair McKelvie, a Native Son of British Columbia, has contributed another volume to a lengthening list of publications dealing with the story of his beloved province. The sub-title of the book, "Glimpses into the romantic development of Canada's Far Western Province," coupled with a statement from the preface that "The present work is composed of more than one hundred incidents and phases . . . arranged chronologically," clearly indicate the author's purpose. Mr. McKelvie's *Pageant of B.C.* should, therefore, be judged within these terms of reference.

This is obviously not intended to be a formal, definitive history of British Columbia, but is designed for the general reader. The hundred and six chapters of the book originally were published in serial form in the Vancouver *Daily Province*. Mr. McKelvie is a journalist who, in both Vancouver and Victoria, B.C., was for many years connected with the Vancouver *Province*. As a writer of history he has never lost the journalist's quick eye for the colourful incident and bright illustrative detail.

The author has spread a large canvas stretching from legendary times to the end of the nineteenth century. He tells of the alleged visits of Buddhist priests at the close of the fifth century of the Christian Era, and even states that Jews from China may have visited the coast. Unfortunately, the consensus of opinion among present day Chinese historians seems to be that the Buddhist priests went to India, and there is little evidence that the Jews ever reached North America from China. The volume concludes with accounts of the Klondike gold rush, the great fire in New Westminster, both in 1898, and the sending of Canadian troops to South Africa.

It is more or less inevitable that in a series of episodes, all approximately a newspaper column in length, it is impossible to stress the more important events. Mr. McKelvie knows his sources and has read widely. No one can cover the whole story of what is now British Columbia without making some slips in detail. An example may be cited from p. 137. It is doubtful whether Richard Blanchard's governorship "was the first step in Government and public administration taken in the western half of Canada." The official Council of Assiniboia dates back to 1835, and even in the Selkirk period there was a similar council. As already suggested, this volume is for the general reader and not the specialist. The style is good, on the whole, but this reviewer found it a bit laboured in places.

Dr. Sage is former head of the department of history, University of British Columbia.

A word should be added concerning the coloured illustrations by Mr. Frank Newfeld. They do not always coincide with the letterpress, but they are vivid and rather unusual.

Mr. McKelvie's *Pageant of B.C.* will probably give pleasure to many readers. Its format is good and the author has brought his forty years of historical study into a new and attractive focus.

CANOEING, by Carle W. Handel, A. S. Barnes & Company, N.Y. Copp-Clark, Toronto. 96 pages. $1.75.

Reviewed by R. M. Patterson

I HAVE often been called a canoeman, and I have as often disclaimed that honour. Reading Mr. Handel's *Canoeing* has brought home to me the truth of the above disclaimer: in fact, I see plainly that there is far more to handling a canoe than I had ever imagined.

In *Canoeing* there is much useful information, even if it is obscured by too much detail; but the book appears to be based largely on the classic canoe country of the east —the intricate water system of the Canadian Shield. The mountain rivers of the West present different conditions and there is, in that driving water, seldom time to get out of a canoe "by numbers," as on p. 26. In crossing exposed waters, the man who studies the situation "for hours" from a high hill and then considers the actions of the squirrels and the ants and the face of nature in general is apt to find midday upon him and the wind rising—and camp still standing.

On definite points—I would say that 100 and not 50 feet of trackline is essential on a mountain river, and that it should be of sash-cord which is not too heavy and which, when limbered up, does not kink. The main downstream danger on a powerful river, the eddy, is not mentioned. The high-prowed Indian canoe definitely *was* to be found outside the movies (see Jenness, *Indians of Canada*, pp. 106-7). A factory-made canoe is a much stronger thing than Mr. Handel would have us believe, and very hard to upset when loaded. And canoeing is how you find it, not a drill-book art: I have watched an Indian paddle across the wide Mackenzie, changing sides every two strokes; and I have seen the finest canoeman in the Northwest in and out of the water all day, wading his canoe—each of these actions being described in *Canoeing* as "the sure sign of the tenderfoot." Sift the useful information from the professorial rules, which Mr. Handel himself decries on page 29, and you have a useful book.

Mr. Patterson is well known to "Beaver" readers for his articles on canoe travel in the northwest.

FOLLOW THE WHALE, by Ivan T. Sanderson. Maps and charts by the author. Drawings by F. Wonderoth Saunders. Little, Brown and Company, Boston and Toronto. 423 pages. $5.00.

Reviewed by Thomas Dunbabin

WHEN the Antarctic whaling season of three months closed on Sunday, March 4th, the whale chasers of the Toiyo Fishing Company's unit had taken 1,678 whales weighing nearly 100,000 tons. This was but one of 19 such units hunting whales in the far South. The season closed only because the whalers had caught the 15,000 blue whale "units" allowed by the International Whaling Convention. In this agreement the unit is the great blue whale, the largest of living things. From two to six smaller whales go to the unit.

This slaughter fully bears out Mr. Sanderson's statement that man is "today following the whale with even greater vigour and more deplorable success than ever before."

His history follows the whalers for 18,000 years or so. The story has a magnificent sweep both in time and in space, and Mr. Sanderson tells it with vision, vigour and versatility. He begins the history of whaling at a vague and rather arbitrary date about 16,000 B.C. From the size of harpoons of that period found on the coast of the Bay of Biscay and in Portugal he concludes that the men of the late Old Stone Age used them in whaling. Stools made of the vertebrae of whales have been found in prehistoric hut ruins on Sakhalin. I have seen just such stools used at Lagoon Bay in Tasmania, once a noted bay whaling station. Archaeologists were puzzled when queer-shaped "adzes" made of bone were found in the prehistoric ruins at Skara Brae in the Orkneys, in the Shetlands and in the Hebrides. Later similar tools were found in prehistoric settlements near Hudson Bay. In 1937 Eskimos in Greenland were found using just such "adzes"—to strip the blubber from whales.

Using harpoons headed with stone, primitive and prehistoric men hunted whales on both sides of the North Atlantic, on the Pacific coast from Korea to British Columbia or California and off the shores of the Indian Ocean.

Whaling took a new turn about 1600 A.D. when the Basque captain, Francois Sopite Zaburu of St. Jean de Luz, invented a way to melt down the blubber on board ship. By then the Basques had long been sending whaling vessels far across the ocean but they had boiled the blubber down on shore.

Modern sperm whaling began in 1712 when the sloop of Christopher Hussey of Nantucket, Mass., was blown out to sea and he found and killed a sperm whale. Far too much,

Mr. Dunbabin, Australian press representative in Ottawa, is the author of "Sailing the World's Edge" and "Slavers of the South Seas."

in Mr. Sanderson's opinion, has been written about the "golden days" of American whaling. There is, he says, much arrant nonsense and some pure fabrication. There is a tantalizing hint in the statement that in 1767, when the United States were still British colonies, a fleet of fifty whale-ships made an experimental trip to the Antarctic. This is a story "which it is hoped will one day be told in full."

Mr. Sanderson gives a good account of the floating factory period which is the latest, and may be the last, episode in the long history of whaling. As for the control of antarctic whaling by the International Whaling Commission, the author notes that the inspectors sent out with the whaling fleets have no control and no power. All that they can do is to report breaches of the rules. If such reports have been made no action has followed.

PILOTS OF THE PURPLE TWILIGHT, by Philip H. Godsell. Ryerson's, Toronto, 1955. 225 pages. $4.00.

Reviewed by Frank H. Ellis

THE fact that the author of this book was a member of the Hudson's Bay Company's northern staff for so many years, afforded him the opportunity of gathering first hand knowledge of the subject about which he writes. His book contains a very evenly balanced story in relation to bush flying in the areas he served, together with his own, and other persons' experiences in the north.

Many writers in the past, particularly newspaper reporters, have frequently glorified their "home-town boys," at the expense of equally deserving airmen from other areas. Mr. Godsell has fallen into the unintentional trap set by them. Although he can well be forgiven for doing so, his book certainly revolves around the splendid exploits of Edmonton's "Wop" May. The book is almost a biographical dedication to that fine bush pilot.

Because of May's many contributions to Canada's aerial achievements, no one can begrudge him one word of the credit which Mr. Godsell accords him. However, there were many others equally deserving, whose steadfast devotion to their work as pioneer bush pilots was of the highest order.

In the main, the story is devoted to flying in the northwestern portions of Canada. Unfortunately only the first portion of the famous Imperial Oil flight of 1921 is dealt with. The two Junkers aircraft were the first to penetrate the Northwest Territories, yet no mention is made of the second stage of their operations, when Elmer Fullerton piloted the "Vic" all the way from Peace River to Fort Norman.

The account of overseas war details contained in the first two chapters could well have been left out for it adds nothing to the northern flying story.

Certainly more Hudson's Bay men with early northern experiences should be induced to write their memoirs with special emphasis on the early years of bush flying. The complete story of the Canadian bush pilots and their engineers might then emerge for the first time. It is to writers with knowledge and ability like Mr. Godsell, that Canada now must turn, to obtain such written accounts.

He has done an excellent job. Perhaps his work will inspire others to follow his lead. If this is not accomplished soon, first hand details will vanish into obscurity, and much of the magnificent story of Canada's bush flying heritage will be lost forever.

Mr. Ellis is the leading authority on the history of Canadian aviation, and has written several articles in the "Beaver."

FROM COALMINE TO CASTLE, by James Audain. Pageant Press, New York, 1955. 213 pages. $3.50

THIS is the story of a family; of the amassing of a multimillion-dollar fortune and its dissipation. Its chief interest lies in the fact that the hundred years spanned coincide closely with the story of Vancouver Island from the time of its first settlement.

Robert Dunsmuir, with his family, was brought out from Scotland by the Hudson's Bay Company in 1851 to mine coal at Fort Rupert on the northern tip of Vancouver Island. Coal mining was not successful and the H B C transferred operations to Nanaimo, where in 1853 the Dunsmuirs moved. Later he was released from the Company to work on his own, under licence. That was the beginning of the Dunsmuir fortune.

Robert Dunsmuir had ten children; his elder son James had twelve. Following the vicissitudes of this family is a somewhat complex affair, but it is basically the story of Robert and James. James was an immensely wealthy man but one of limited interests, and few social graces. As a matter of duty rather than inspiration he became premier and later lieutenant-governor of British Columbia.

One cannot help feeling that for its size, its wealth, and its pioneer tradition, the family has left remarkably little impression on the Victoria of today.

While there is a lack of continuity about this family history, it throws light on the social life of its period—*M.B.*

Hitching post, modern style, in the Peace River country. Rosemary Gilliat

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